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Manitoba
Culture, Heritage
and Recreation
Historic Resources

A GLOSSARY OF MANITOBA PREHISTORIC ARCHAEOLOGY

1989

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A Glossary of Manitoba Prehistoric Archaeology

INTRODUCTION

This Glossary is intended to assist amateur archaeologists endeavouring to use technical reports. The definitions represent the meanings understood and shared by the majority of the archaeological community.

Being an interdisciplinary study, archaeology makes heavy use of terms borrowed from other fields of study such as biology, ecology, geology and botany. As it would be impossible to incorporate full glossaries of these sciences, only some of the more commonly-used terms are included.

The entries are fully cross-referenced. Headwords appear in bold face and words within the definition which also appear in this type style are defined elsewhere in their most common form.

Compound terms consisting of a noun and a preceding adjective are generally listed alphabetically under the keyword or noun. For example, "channel flake" is defined under the "**flake**" heading.

Terms which have more than a single meaning have numbered definitions, beginning with the most common and proceeding to the more obscure.

Standard English spelling is used throughout, except in those cases where American spelling is more generally used. Foreign words and phrases are underlined.

For additional definitions of terms borrowed from other disciplines, the reader is directed to dictionaries peculiar to those disciplines.

Note: projectile point illustrations are depicted life-size.

aberrant. non-typical; deviation from the class to which an **artifact** or phenomenon belongs.

aboriginal. **indigenous**; pertaining to the original occupants of a given region.

abrader. see **grinding** stone.

absolute dating. see **dating, absolute**

acculturation. the process by which a **culture** absorbs the **traits** or customs of another culture with which it is in direct contact.

activity area (or activity sphere). that portion of an **archaeological site** which can be equated with a single activity such as **flint knapping**, butchering, or cooking.

A.D. abbreviation of the Latin *anno Domini* meaning in the year of our Lord. When used as a prefix or suffix to a date, it indicates the number of years elapsed since the supposed date of the birth of Christ.

adaptation. the sum total of biological and behavioural adjustments which an organism makes to its **environment**.

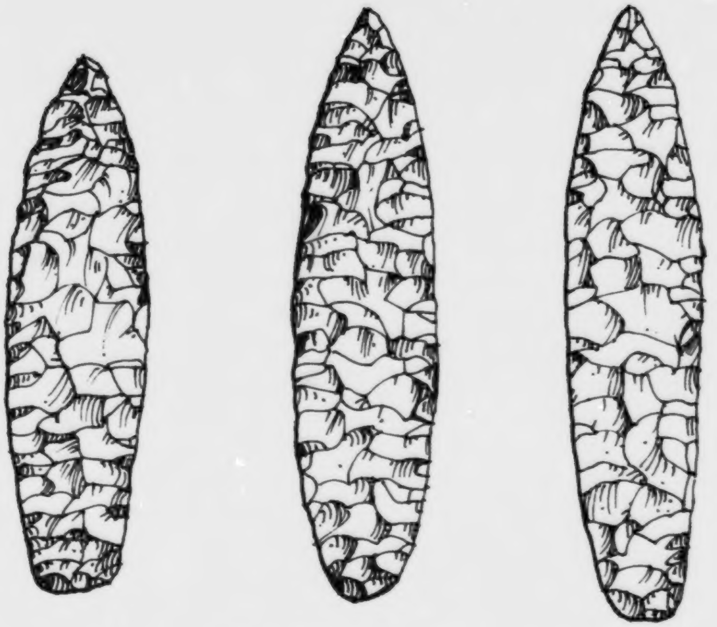
adze. an **axe**-like implement in which the **blade** (sense 2) is **hafted** such that the cutting edge lies perpendicular to the handle after the fashion of a hoe. Used primarily for woodworking. **trihedral adze.** an adze with a triangular cross-section.

aeolian (U.S. eolian). **sand, clay, silt,** or mixed deposits that have been carried by the wind. **Loess** and sand dunes are typical aeolian deposits.

aerial photography. vertical and oblique photographic imagery of the earth's surface taken from any point of advantage. The use of specialized films can render visible **features** which could not otherwise be detected. **Topographic** relief can be emphasized by photographing in the morning or early evening when shadows are most pronounced. Past human activity may be indicated by the patterning of different soil types or by the mosaic of vegetational types which they support. Cereals are particularly important in this regard, and study of such **crop marks** can reveal the presence of buried foundations and roads. Thus, aerial photography may be used not only as a technique for the discovery of new sites, but as a means of appreciating the context or setting of a previously-known site.

agate. a banded or mottled **chalcedony**.

Agate Basin. a **physiographic feature** in Wyoming, also known as Moss Agate Arroyo which has given its name to the **lanceolate projectile points** recovered there, to the **archaeological site** from which they were recovered (occasionally including the nearby Brewster Site), to the **complex** of associated **artifacts** and the **culture** of the makers of the artifacts. In outline form, the points are neither **notched** nor stemmed and



Agate Basin points

range in length from 5 to 15 cm. **Flaking is horizontal** and it is this trait that serves to distinguish them from the **Angostura morphological** characteristics. Basal and/or lateral **grinding** may be present and maximum width tends to occur toward the **distal** end. Agate Basin sites occur throughout the North American **plains** and adjacent areas. A small number of Agate Basin sites have been excavated in Manitoba but many of the characteristic points occur in **surface collections**. The complex occurs within the late **Palaeo-Indian** (or **Plano**) Period and is believed to represent the material culture of nomadic bison hunting peoples.

aggradation. an accumulation of sediment resulting in the building up of a land surface such as part of a river bank upon which sediments are regularly deposited during the Spring flood.
agriculture. a **subsistence** mode which involves the use of machinery or domesticated animals in the cultivation of plants.

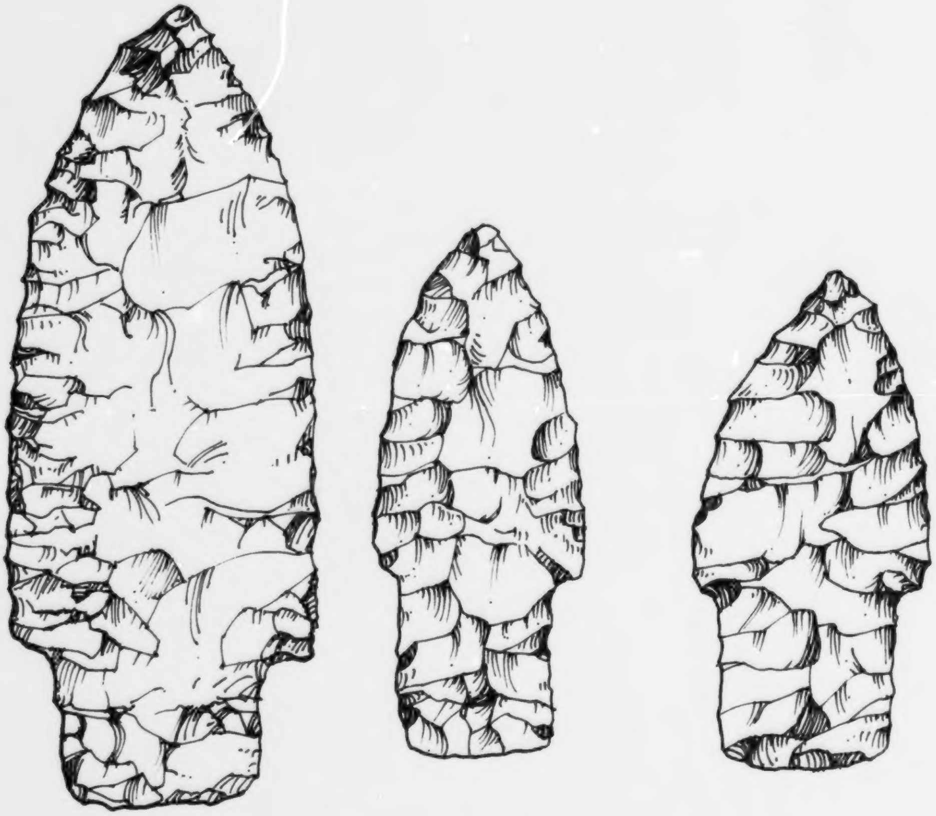
A-horizon. the uppermost, often dark-coloured natural level in a **soil profile** characterized by roots, **humus**, and a lack of clay, iron, carbonates and soluble salts which have leached to lower levels.

Alberta. a **Plano projectile point** style of the northwestern

plains. Specimens are as much as 20 cm in length, parallel-sided with blunt tips, and stemmed. They have fairly frequently been recovered from sites which also contained **Scottsbluff** points and for this reason have been attributed by some to the **Cody Complex** or to the **Horner Phase**. In a very general way, they are vaguely similar to Scottsbluff points but tend to be larger, and have relatively longer stems. Alberta points are most common in Alberta and Saskatchewan, but a few have been recovered in **surface collections** in southwestern Manitoba.

Algonkian (or Algonquian). a grouping of related languages whose speakers were originally distributed from Newfoundland to California and from the northern Prairie Provinces of Canada to the American southeast. The term derives from the Algonkin (or Algonquin) people who resided in the Ottawa and St. Lawrence River valleys. Algonkian languages and dialects in Manitoba include Cree, Ojibwa(y) or Chippewa(y), and Saulteaux.

alidade. a surveying instrument consisting of a sighting device and a scaled rule. Often used in



Alberta points

conjunction with a **plane table**, the relative position of objects is determined by **triangulation**.

alluvial fan. a fan- or wedge-shaped accumulation of **silt**, **sand**, **gravel** and boulders deposited by rapidly-flowing streams when they reach flatter terrain.

alluvium. a generally fine-grained mixture of **sand**, **silt** and mud deposited by flowing water.

alternate flaking. see **flaking, alternate**.

Altithermal. a climatic/geological period postulated by Ernst Antevs (1955) for the warmer, drier period which he contended characterized western North America between 7000 and 4000 years ago. The term **Atlantic** Climatic Episode is now more commonly used for this mid-**post glacial** interval.

ancestor. forebear; one from whom another is descended.

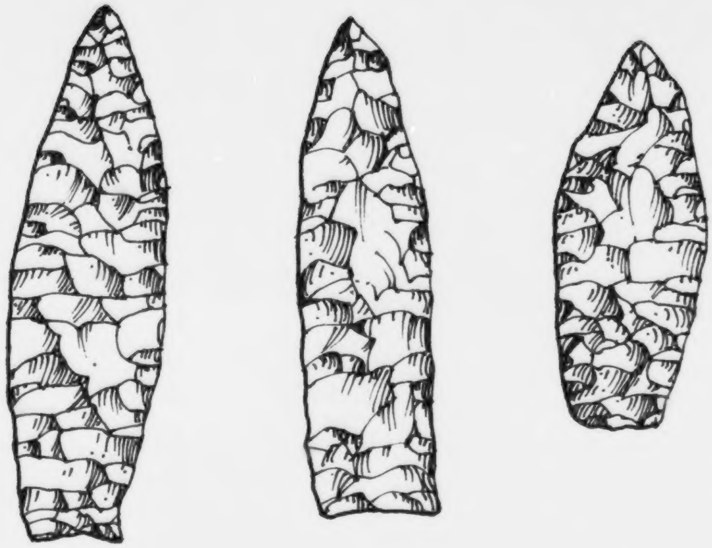
Anderson Corner-notched. a **projectile point** style defined by MacNeish (1958) on the basis of his investigations in southeastern Manitoba and attributed to the **Anderson**, **Nutimik** and **Larter** foci. As originally defined, these points are relatively long (30 to 68 mm) and narrow with straight bases and expanding stems. This designation is less commonly used than previously.

Anderson Focus. the earlier (500 B.C. to A.D. 500) of the Middle or Initial **Woodland** cultural-historical period in MacNeish's (1958) southeastern Manitoba **chronology**. It was later designated the Anderson **Phase** by Mayer-Oakes (1967). Hlady (1970) finally advocated the grouping of the Anderson with the other Middle Woodland **focus** (**Nutimik**) due to a general absence of distinguishing artifactual **traits**, and further proposed that this new entity be designated the **Laurel** Phase. The suggestion met with general acceptance and the earlier term is no longer used.

andesite. a fine-grained grey to green **igneous** rock composed primarily of minerals of the **feldspar** group -- in particular andesine, amphibole and pyroxene.

Angostura. a **Plano projectile point** style (previously termed "Long") named by R.P. Wheeler (in Wormington 1957) after the Angostura Basin in South Dakota. Angostura points, sometimes termed "Lusk" points, are long and narrow, **lanceolate** in outline form, rhomboidal in cross section, and have concave or straight bases (Agogino, _et_ _al_. 1964). They are very similar to **Agate Basin** points in terms of **morphology**, age and geographic distribution, but may be distinguished by parallel **oblique flaking** (Pettipas 1977) as opposed to the horizontal flaking which characterizes Agate Basin specimens.

anneal. to temper or harden by exposure to heat. Some **lithic** materials may produce more regular planes of fracture subsequent to controlled annealing and some metals may be rendered less brittle.



Angostura points

anthropology. the study of human cultural and biological **adaptations** in all times and places. In North America, anthropology consists of four subfields: **archaeology, cultural anthropology, linguistics** and **physical anthropology.**

anvil. a block of stone or metal upon which other materials are shaped or worked through striking.

arbitrary levels. an archaeological excavation technique in which the thickness of the layers removed is chosen for convenience. This method is generally used when a **site** does not possess natural **stratigraphy** and cannot, therefore, be excavated **stratum** by stratum.

archaeo-astronomy (or astro-archaeology). the systematic study of astronomical knowledge and lore of **prehistoric** peoples.

archaeological record. the sum of all evidence concerning past events and peoples.

archaeological site. any location which shows evidence of the prior presence or influence of human beings.

archaeology. the science and/or methods concerned with the recovery, description, analysis and explanation of the physical remains of past human **cultures.** In North America, some archaeologists view their task as the **cultural anthropology** of the past while others restrict themselves to the **culture history** or the chronicling of events of a particular area.

Archaeology may deal with either **prehistory** or history -- that period since the introduction of written records.

archaic. ancient; pertaining to a much earlier time period.

Archaic. a term variously used to denote a stage of cultural development or a specific period in **prehistory** characterized by a particular way of life (i.e. **Primary Forest Efficiency**) and/or the nature of the **tool-kit** employed. In Manitoba, the term is most commonly used in reference to a period (ca. 5000 B.C. to the time of Christ) in the prehistory of the forested portion of the province subsequent to the **Palaeo-Indian** and prior to the **Woodland**. It is roughly contemporaneous with the **Middle Prehistoric** or Meso-Indian Period or Stage -- the second of the two three-staged schemes of **plains** prehistory. By definition, Archaic **assemblages** do not include ceramics -- the latter being the major technological marker of the Woodland Period. By the end of the Archaic Period, the **atlatl** has largely replaced the **spear** as a hunting implement, but the **bow** has not yet been introduced; human groups remain mobile, but only seasonally so, operating within more restricted geographic areas; and plant foods have come to play a more important role in **subsistance**.

archives. 1. a collection of primary historical documents such as journals, diaries, maps and personal and business correspondence. 2. the institutional repository within which such collections are housed. Archival information and the findings of **historic archaeology** often complement one another, providing more information on a historic site or time period than could either method of inquiry alone.

Arctic Small Tool tradition (ASTt). a grouping of archaeological **complexes** distributed across the North American Arctic from Alaska to Greenland which date between roughly 3000 **B.C.** and **A.D.** 1000. The **tradition** is so named due to the extremely small, finely worked tools which these people manufactured. Notable examples include **burins, microblades** and **side-blades**. Manitoba occurrences of this tradition include the **Pre-Dorset** and **Dorset "cultures"** which some have reason to believe are ancestral to **Inuit culture**. Sites containing these materials are restricted to the northeastern quarter of the province.

arrow, a **dart**-like projectile propelled by a **bow**. Feathers (fletchings) may be attached to stabilize the arrow in flight, and a stone, **bone** or metal tip (**arrowhead**) may be fitted to improve its capacity for penetration.

arrowhead. typically made of **bone** or stone, the pointed tip of an **arrow**. If the means of propulsion cannot with certainty be identified as a **bow**, the term **projectile point** is more properly used.

arrowshaft straightener. see **shaft straightener.**

articulated. jointed, as in the case of **bones**; to be in their normal positions relative to one another when found in the course of excavation. The term may also be used of broken **artifacts**, the fragments (or **sherds**) of which lie in their original relative positions.

artifact. any object manufactured, used, moved or otherwise modified by human beings, including all waste materials and by-products of these processes. Occasionally, the term is used in the more restricted sense of a completed object as opposed to the associated **detritus**.

Arvilla Complex. a late **Woodland complex** known almost exclusively from mound excavations along the Red River in the Dakotas and Minnesota and in the central portion of the latter state. As defined by Johnson (1973) it is characterized by flexed primary and bundled secondary **burials** below **linear** or circular mounds. **Grave goods** include both utilitarian and ornamental objects. Among the latter are numbered **beads, pendants** and **gorgets**.

a.s.l. abbreviation for "above (mean) sea level"; the standard reference of elevation used in **N.T.S.** (National Topographic Series) maps; the vertical height of an object as measured from the mean elevation of high and low tides.

aspect. in the **Midwestern Taxonomic Method** devised by McKern (1939), an aspect referred to a number of **foci** which could be grouped on the basis of at least one shared **trait**, such as a **pottery** style. The term is not used very frequently any more.

Aspen Parkland. a vegetational zone which lies between the **grasslands** and the northern coniferous or **Boreal Forest**. It comprises a mosaic of grassland interspersed with groves of white birch, white spruce, balsam poplar and most commonly, trembling aspen.

assemblage. the sum total of the kinds and styles of **artifacts** and **features** which are associated with one another and with a single **occupation**; all evidence of human activity within a single **component**. A minority of writers use this term in reference to the material remains of a **culture** or those associated with a **phase**.

association (also "Law of Association"). the nearby location of **artifacts** in a sealed natural or cultural unit such as **stratum, tomb, grave** or **cache**. It is often assumed that such artifacts were deposited at the same time by people of the same **culture**.

astragalus. talus; a **bone** of the ankle.

Athapap Culture. an archaeological **culture** defined by Hlady (1967) on the basis of investigations at a number of sites on Lake Athapapuskow near Flin Flon. The **complex** included Athapap **Lanceolate**, Evans Lanceolate and Baker's Narrows Corner-notched **projectile points, biface blades, scrapers, drills**

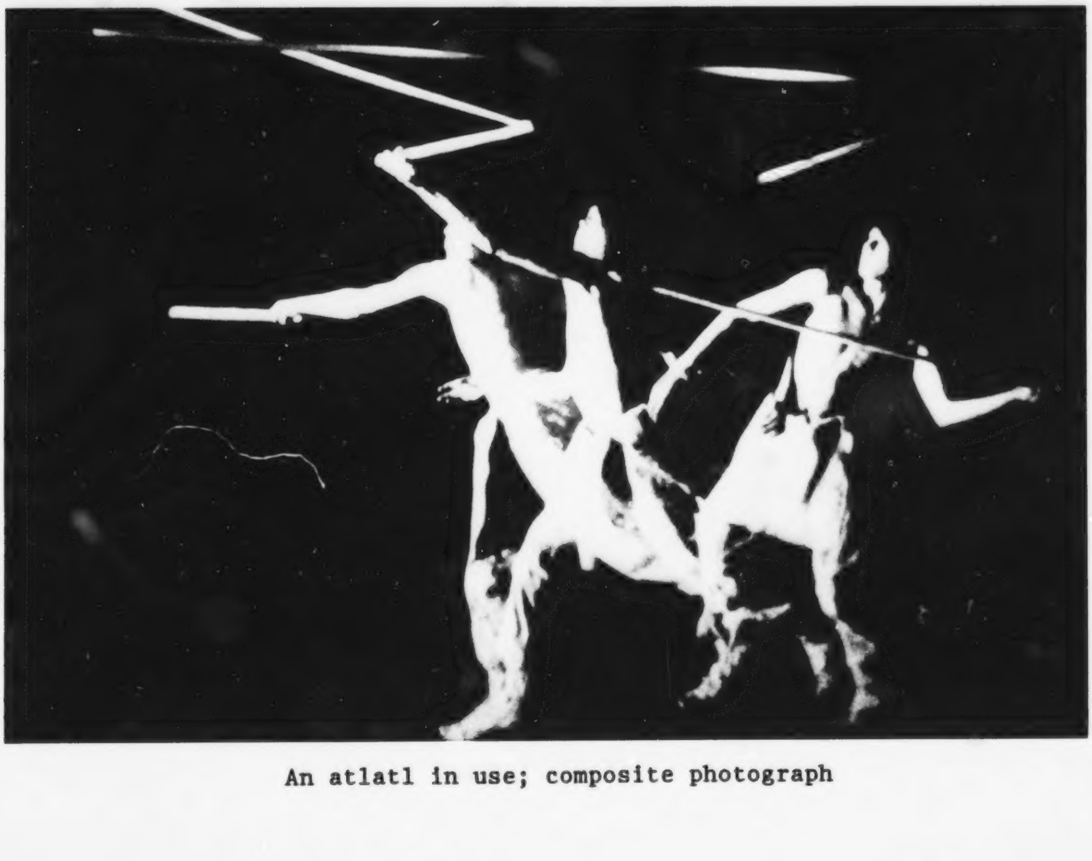
and **gravers**. Hlady estimated the age of the culture at 2500 to 5000 years.

Athapap Lanceolate. see **Athapap Culture**.

Athapaskan or Athabascan. a grouping (or family) of Native American languages within the **NaDene Phylum**. Athapaskan speakers were originally distributed from the arctic to the American southwest and as far west as coastal California. The principal Athapaskans in Manitoba at contact were the Chipewyan who occupied the extreme north of the province.

Atlantic. a warm dry climatic episode in central North America also known as the xerothermic, the hypsithermal, the Climatic Optimum, the Long Drought and most commonly (but incorrectly) the **Altithermal**. This episode, dated at 6540 to 3110 B.C. (Wendland 1978), witnessed the spread of **grasslands** at the expense of forest in southern Manitoba, and probably an influx of grassland adapted **fauna** (such as bison) and the late **Plano** hunters who preyed upon them.

atlatl. the Aztec word most commonly used by archaeologists to refer to the spear thrower or

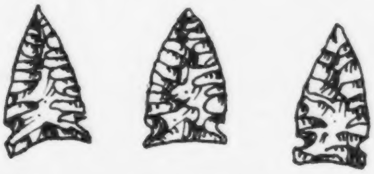


An atlatl in use; composite photograph

throwing board. It consists of a board, approximately 70 cm in length with a longitudinal groove to receive the **dart** or **spear** and a hook at one end which makes contact with the butt end of the projectile. The atlatl is held by the end opposite the hook, and a small polished stone (atlatl weight; see **bannerstone**) may be attached immediately behind the grip to lend balance. By serving essentially as an extension of the thrower's arm, a projectile can be propelled 60 per cent further than would otherwise be possible. An experienced user can maintain a practical degree of accuracy at distances on the order of 80 m.

attribute. a property or quality of any archaeological object such as the length of a **projectile point**, the **hardness** of a **potsherd** or the colour of a bottle fragment. Theoretically, an **artifact** possesses an infinite number of attributes, but an archaeologist will limit analysis to those believed to be **diagnostic** -- those which will provide the information sought.

Avonlea. a term applied to a **projectile point** style and the **phase** with which it is associated in early **Late Prehistoric plains prehistory**. As defined by Kehoe (1973), the Avonlea point is small and well-made with V- or U-shaped **side-notches** above a generally **concave** base and small **ears**. In some cases, Avonlea points may be easily confused with some of the other small side-notched points of this period. Other Avonlea Phase **artifacts** include **lithic scrapers**, **bifaces**, **choppers** and **ceramic** vessels. Avonlea is represented at a number of sites in southwestern Manitoba where these people pursued a way of life focusing on the **communal hunting** of bison. The occupation of the province by Avonlea people is estimated to have occurred between approximately **A.D.** 400 and 700. See Reeves (1983) for the most recent statment on Avonlea.



Avonlea points

Bone awls

awl. a pointed hand tool, frequently of **bone**, used for punching holes in leather.

axe. a heavy chopping tool of stone or metal which may be handheld (a handaxe) or **hafted**. In the latter instance, the head is attached such that the cutting edge parallels the handle.

babiche. lacings, thread, thongs or netting made of **sinew**, gut or hide.

backdirt. see **backfill.**

backed. being intentionally dulled along one edge. A **blade** (sense 2) may be backed in order to allow it to be held opposite the cutting edge.

backfill. to refill an excavational **unit** at the end of the investigations; the dirt used to accomplish this. The latter is also known as backdirt.

Baker's Narrows Corner-notched. see **Athapap Culture.**

baleen. whalebone. The term is most commonly used to refer to the bony substance within the mouth of the whale which is used to strain food. It is widely used by **Eskimos** for making tools and ornaments.

bale seal. a small, labelled metal plate that was attached by wire to a bale during the Fur Trade. Because it had to be cut to reopen the bale, thefts during shipment were reduced.

Bale seal

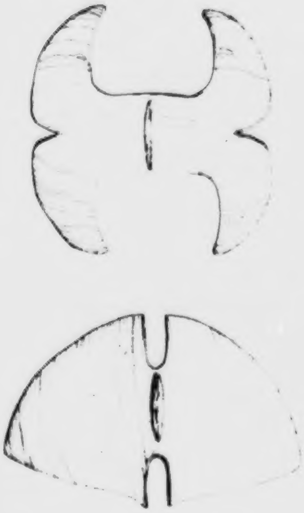
balk. see **baulk.**

band. in Service's (1971) scheme, the least complex of the four kinds of societies. These kin-related societies are small, consisting of 30 to 100 people who tend to camp and travel together. There are no full-time "chiefs" and no real conception of ownership of either objects or territory. Division of labour is almost entirely determined by sex, and as most bands subsist by hunting and gathering, women gather plants and perhaps snare small animals near camp, while the men range further from home in search of game. The kinds of activities pursued, and sometimes the location of the camp, may shift in accordance with the seasons as different foods become available in different locations and as game animals adjust their feeding patterns. In the majority of cases, members of band societies acquire spouses from outside of their own band (local **exogamy**). Married couples take up residence with the husband's band (**virilocality**) and their children are raised there (**patrilocality**) as a consequence.

bannerstone. a (usually) polished stone implement which may take a variety of forms. One of the most common is "winged" with a central hole. These may have served some ceremonial function or may simply be elaborate **atlatl** weights.

barb. a small point which faces the opposite direction to the main point on an object such as a fishhook or **arrow** tip.

basal grinding. see **grinding, basal.**



Bannerstones
(shown 1/3 actual size)

basal notching. see **notching, basal.**

basalt. a fine-grained black, brown, grey or green rock consisting of **feldspar**, olivine, hornblende and augite. Often used for the manufacture of ground stone tools and ornaments.

basal thinning. the removal of **flakes** from the base of a **projectile point** or **blade** (sense 2) in a lengthwise fashion in order to facilitate **hafting**.

basket. a container manufactured by the weaving, coiling or twining of vegetal materials such as cane or straw.

bastion. a projecting structure built onto a **palisade** for purpose of defence; any fortified place.

baulk. unexcavated strip left standing between excavation **units** so that soil **profiles** remain in place for study and reference.

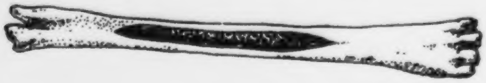
Baulks

B.C. abbreviation for Before Christ. When used as a suffix to a date, it indicates the number of years prior to the supposed date of the birth of Christ that an event occurred.

B.C.E. abbreviation for Before Common Era. When used as a suffix to a date, it indicates the number of years prior to the supposed date of the birth of Christ that an event occurred. B.C.E. is thus equivalent to B.C., but is used primarily by non-Christians, or by Christians who wish to avoid the **ethnocentrism** implicit in the use of B.C. in connection with non-Christian societies.

bead. a small disc-shaped, spherical or tubular **artifact** of **bone**, shell or glass which has been perforated so that it may be strung on a necklace.

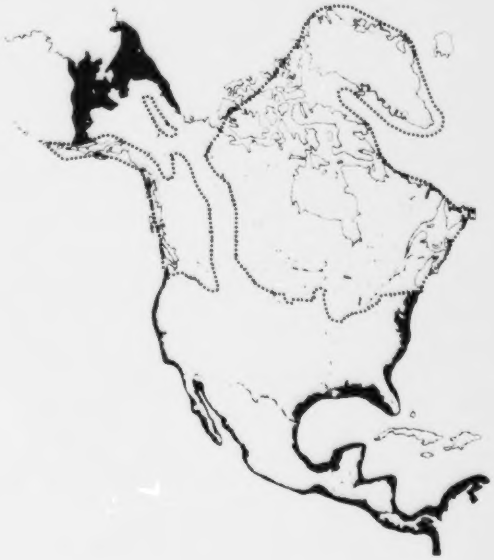
beamer. a tool fashioned of wood or the long**bone** of a large animal. It consists of a sharpened edge which runs along nearly the full length of the tool. The ends serve as handles by means of which it is drawn towards the user. It is used in the treatment of hides.



Beamer

bedrock. the solid layer of rock which underlies **soil**, **gravel** and other loose formations or deposits nearer the earth's surface.

Beringia. the landmass which existed in the Bering Strait between Alaska and Siberia during the last (**Wisconsinan**) Ice Age. At the height of the Wisconsin, sufficient water was "locked up" in the glaciers to cause a marked reduction in ocean levels. Thus, land was exposed in many coastal regions, and a "**land bridge**," over 1500 km wide was formed between Asia and North America. For a century, Beringia has been widely accepted as the most probable route of entry for the first people into the New World. The land bridge likely flooded a number of times in accordance with climatic changes and fluctuations in sea level, but was finally submerged 10,000 years ago.



Beringia

Besant. a valley in southern Saskatchewan which has given its name to a **projectile point** style and the **Late Prehistoric Period phase, horizon** or **culture** within which it occurs. The side-notched points generally have **convex** edges, sharp **shoulders** and straight bases. The latter are often thinned and ground and maximum width tends to occur at the **shoulder** or base. Length ranges from approximately 15 to 80 mm. The remainder of the **artifact complex** consists of **drills, perforators, gravers, scrapers, spokeshaves, mauls** and **abraders**. Besant peoples pursued a way of life focusing on the **communal hunting** of bison by means of **(bison) jumps** and **(bison) pounds** throughout most of the northern **plains**. Their diet was supplemented by fishing, fowling and the collection of shellfish. Many other aspects of the Besant Phase are controversial. Chief among these are whether or not Besant peoples made **pottery** and the nature of the relationship between Besant and the **burial mounds** of the **Sonota Complex** along the Missouri River in northern South Dakota. Although Besant is here classed as Late Prehistoric, the **bow** (one of the defining traits of this period) was not in use in the earlier portions of this phase. See Reeves (1983) for the most recent statement on Besant.

bevelled surface. one that meets two others at angles other than right angles. The working edge of a scraper would be an example of such a surface.

B-horizon. that natural level within a **soil profile** which directly underlies the surficial **A-horizon** and which contains the **clay**, iron oxides and carbonates which have leached down from it.

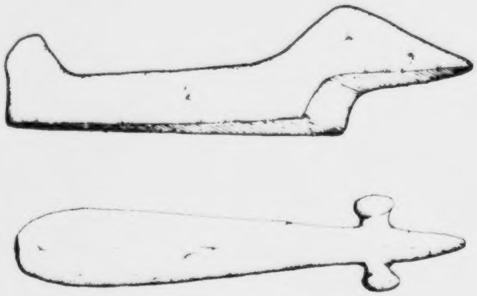
biface. a stone tool which has had **flakes** removed from both faces. No particular function is implied by this term as **projectile points**, knives and **drills** may all be bifacially worked.

biology. the science concerned with the structure, function, distribution, **adaptation** and evolution of all living organisms including both plants and animals.

bipolar. a technique used in stone tool manufacture in which the **core** is rested on an **anvil** while being struck from above with the hammer. The waves of force are therefore not only directed downward from the hammer, but also reflected back upward from the anvil. Hence the **flake** may appear to have been struck at both ends.

bird arrow. an **arrow** which has been purposefully blunted so that it will not damage the hides of animals or become imbedded in a tree and thus be lost.

birdstone. a polished stone object which resembles a bird in profile. These probably functioned as **atlatl** handles or weights (see **bannerstone**).

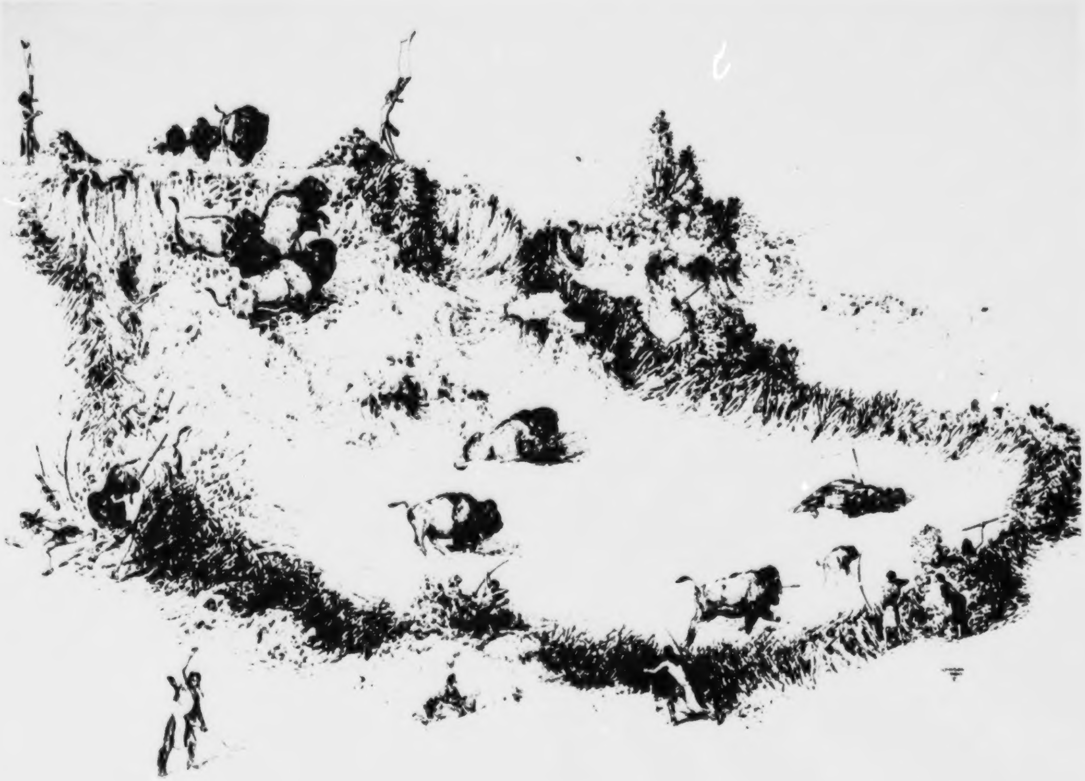


Birdstones

bison corral. see **bison pound.**

bison "jump". a **site** at which bison have been killed by being stampeded over a cliff. This ancient **communal hunting** technique was occasionally used in conjunction with a **(bison) pound.**

Bison occidentalis. a large, now extinct variety of bison that roamed the North American **grasslands** during the **Holocene.**



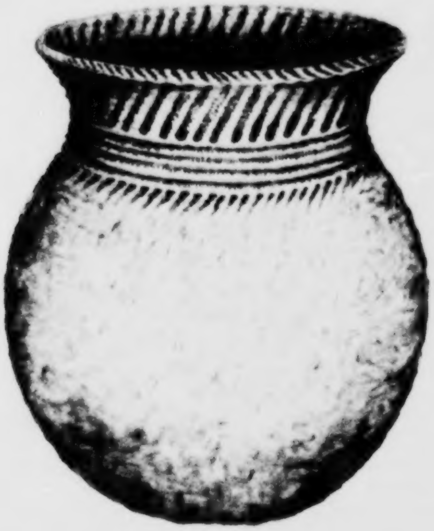
Bison jump and pound

bison pound. a physiographic feature or a specially constructed enclosure into which bison were driven to be slaughtered.

bit. the cutting edge of an adze, axe, chisel, etc.

Bitterroot. an archaeological phase or culture represented at a number of sites in the Columbia Plateau region in eastern Oregon and in southern and eastern Idaho which Swanson (1962) equates with the northern Shoshone. Projectile points of this complex are side-notched and essentially indistinguishable from those from plains environments to the east (termed Logan Creek or Simonsen), and from those of the Mummy Cave Complex of the eastern slopes of the Rocky Mountains from Alberta to Wyoming. Associated artifacts include conical and wedge-shaped cores, choppers, oval, triangualar and side-notched end scrapers, stemmed and corner-notched bifaces, perforators, manos, whetstones, bone awls,and beads of stone and seeds. Fauna include deer, antelope, bison and sheep. Radiocarbon dates range from 5200 to 3650 B.C.

Blackduck. the name of a lake in Minnesota which has lent its name to a distinctive Late **Woodland** ware as well as to the **focus**, **phase**, **tradition**, **culture** or **horizon** within which it occurs. The pots are round-based with constricted necks and flattened and thickened lips. Decoration occurs on the neck and rim, on the lip, and occasionally on the inner rim. The most common decorative elements are horizontal and **oblique** cord-wrapped stick impressions and exterior **punctates**. Method of manufacture was either by the **paddle-and-anvil** technique, or involved formation inside of a fabric container. As a consequence the undecorated portions of the vessels are either **cord-impressed** or **fabric-impressed**. Associated **artifacts** and **features** may include small triangular and side-notched **projectile points**, a variety of stone and bone hide-scraping tools, ovate knives, stone **drills**, smoking pipes, bone **awls**, needles, **harpoons** and spatulas, bear and beaver tooth ornaments and tools, small copper tools and ornaments and **mound burials**. Blackduck peoples were widely distributed from the shores of Lake Superior to the Manitoba/Saskatchewan border, and from central Manitoba in the north to central Minnesota in the south. The locations of these **sites** and the nature of the material remains within them indicate that these people exploited a variety of forest resources, possibly including wild rice as well as the resources of the **grasslands** -- most notably bison. See Anfinson (1979) for a recent, general discussion.



Blackduck vessel

blade. 1. the cutting edge of a tool. 2. a cutting tool. 3. that portion of a **projectile point** or knife which extends beyond the **haft** element. 4. a long, parallel-sided (prismatic, lamellar) **flake** which has been detached from a specially prepared core. These may be used as is, or used as the basis for the production of other tools. This highly sophisticated technique makes the most economical use of **lithic** resources.

blank. an incompletely manufactured stone tool which has the general outline of the intended final form. The rough fashioning of blanks at a **quarry** would allow one to avoid transporting greater amounts of unmodified stone to camp or fashioning all stone tools at the source of the stone.

blowout. a geological term used to refer to the large bowl-shaped depressions created by wind (**aeolian**) **erosion** in arid and semi-arid **environments**. As the top **soil** and occasionally some of the underlying **strata** are removed in this process, **artifacts** may be exposed.

bodkin. 1. an **awl** used for making holes in fabric. 2. a blunted, large-eyed needle.

body sherd. technically, a fragment of the body of a larger **artifact**. Most commonly, it refers to a fragment of a **ceramic** vessel which did not constitute part of the lip, rim, neck, **shoulder** or base.

bone. the hard tissue, composed of both organic and inorganic materials, which makes up the skeletons of vertebrates. Because of their density, bones may survive in the **archaeological** record long after the decomposition of the soft tissue.

bone bed. a concentrated layer of **articulated** and disarticulated animal **bones** usually taken as an indication of a butchering and/or **kill site**. Typically found in **association** are weapons and butchering implements.

bone grease. the sweet marrow which is extracted by the smashing and boiling of **bones**. The grease floats and may be skimmed from the surface for immediate consumption, for storage or for use in **pemmican**-making.

Borden Designation. the standard **archaeological site** designation and labelling system in Canada. The label consists of four letters (alternating upper and lower case) followed by a number, e.g., EaKv-1. The alphabetic prefix refers a block of 10 minutes by 10 minutes within a grid system which covers all of Canada south of 62° N latitude. The numerical suffix in the above example indicates that this is the first site within this block to be designated.

boreal. of or pertaining to the north, its climate, **flora**, **fauna**, **environment**, resources and peoples; commonly used in reference to the northern forests.

Boreal. a central North American climatic episode dating 7350 to 6540 B.C. This interval marks part of the warming trend between the Late Glacial climatic pattern and the warm dry **Altithermal** or **Atlantic** Climatic Episode which followed. During this time, the ice sheets retreated and vegetation zones moved towards their modern locations (Wendland 1978).

Boreal Archaic. an archaeological **tradition** associated with the mixed coniferous-deciduous forests of the American Northeast. As defined by Byers (1959), it was characterized by stemmed and side-notched **projectile points**, thumbnail and keeled **scrapers**, expanding-based and side-notched **drills** or **perforators**, **shouldered** knives and an abundance of ground and polished implements: spearpoints, **adzes**, **gouges**, **plummets**, rods, tubes, **bannerstones**, semilunar knives and **birdstones**. It was believed that Boreal Archaic peoples employed a diversified economy involving fishing, hunting, shellfish collection and plant harvesting. This concept is no longer commonly used.

Boreal Forest. the technically correct term for the primarily coniferous forest which extends in a continuous arc from Alaska to Labrador and includes the **Aspen Parkland** -- the transition between the coniferous forest and the **grasslands** to the south. The white and black spruces are the most common elements throughout, with tamarack, balsam fir, jackpine, alpine fir and lodgepole pine achieving more restricted distributions. Trembling aspen and balsam poplar are the most important deciduous species (Rowe 1972). The Boreal Forest is roughly equivalent to the **taiga** of ecologists.

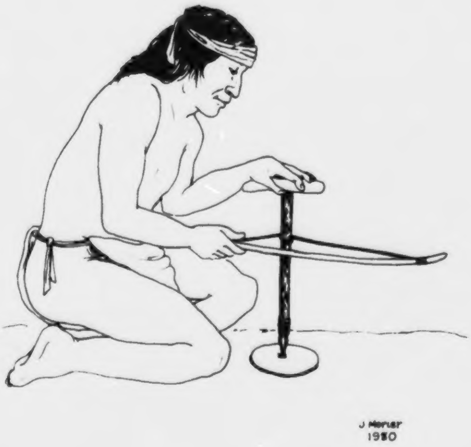
boss. a small bump-shaped node or protuberance. When used as a decorative element on **pottery**, bosses may be produced either by the impressing of a deep **punctate** on the opposite surface, or by the application and smoothing of small amounts of **clay**.

botany. the science concerned with the study, classification, structure, **ecology** and economic importance of plants.

boulder mosaic. see **petroform**.

bow. a weapon consisting of a staff of elastic material such as wood, which is bent by a shorter piece of twine attached to each end. The tension thus imparted to the string is utilized to propel an **arrow**. In Manitoba, the bow came to be used during the **Woodland** or **Late Prehistoric Period**. **composite bow**. a bow the shaft of which is made of at least two different elements such as horn or **sinew** in addition to wood. **compound bow**. a bow fashioned by fastening several pieces of wood together for increased power. **sinew-backed bow**. a bow with sinew wrappings for added strength.

bow drill. a form of **fire drill** in which the stick is rotated with increased speed by virtue of the back-and-forth movement of a **bow**, the string of which is looped around it.



Bow drill

B.P. abbreviation for Before Present. When used as a **suffix** to a date, it indicates the number of years prior to A.D. 1950 that an event occurred.

bracer. see **wristguard.**

brachycephalic. round-headed; having a **cephalic index** of 80 or more.

breccia. a composite rock composed of angular fragments of more ancient rocks bound together by a natural cement.

brushed. a method of modifying the surface of **ceramic** vessels by smoothing the still wet **clay** with a grass brush. This produces a heavily scored or "scratched" appearance.

buffalo chip. a piece of dried bison dung used as fuel by Native Americans.

buffalo jump. see **bison "jump".**

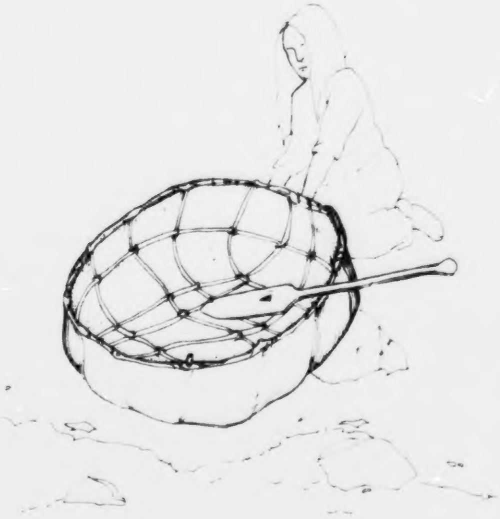
buffalo pound. see **bison pound.**

bulb of percussion. a bulb-shaped (boss-like) feature on the **ventral** face of a **flake** immediately below the **striking platform.**

bulbar scar. a minute surface irregularity which is occasionally present on the **bulb of percussion** of a man-made **flake.**

bull boat. a simple tub- or bowl-shaped boat made by stretching a bison hide over a willow frame bound with thongs. Used by various North American Native peoples particularly by residents of the **plains.**

bundle burial. see **burial, bundle.**



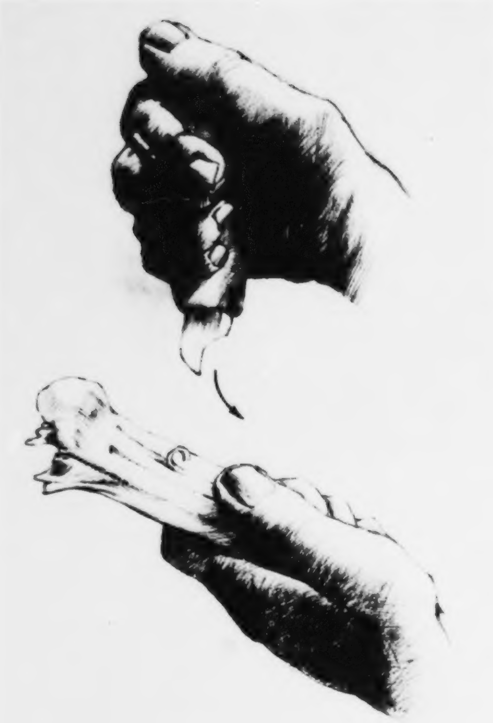
Bull boat

burial. 1. the covering-over of an object with earth. 2. the ceremonial entombment of a dead body beneath the ground or in a chamber. 3. the **feature** thus created consisting of the individual(s) and the **context.** **bundle burial.** the (re-)burial of bundled-up, disarticulated, defleshed remains. **extended burial.** placement of the individual with arms at the sides and legs extended. **flexed burial.** placement of the individuals with arms and legs bent up against the body. **intrusive burial.** the excavation of a **grave** into a burial pit or **mound** constructed at an earlier period. Two individuals may thus appear to be in **association** although they are not contemporaneous. **multiple burial.** collective interment; the placement of two or more bodies within the same grave. **platform burial.** see **scaffold burial. primary burial.**

placement of the dead in a grave with the flesh at least partially intact such that after further decomposition, the bones remain articulated. **scaffold burial.** placement of the dead on a scaffold above the ground where it may be defleshed by scavengers. The remains may be interred at a later date. **seated burial.** entombment of the deceased in a sitting position. **secondary burial.** the final interment of an individual subsequent to an earlier burial in which the flesh decomposed. Secondary burials are therefore not articulated (or frequently improperly articulated) and some bones may have been lost. **supine burial.** placement of the dead on the back with face and palms upward.

burial mound. a raised mass of earth or debris within or below which deceased individuals are placed. In Manitoba mounds are associated with **Woodland** peoples.

burin. a generally small **flake** tool which bears a short, chisel-like cutting edge. They are believed to have been used for engraving or scoring **bone**, antler or ivory prior to splitting.



Burin

C-14. abbreviation for "carbon 14"; a radioactive form (or isotope) of carbon used in **radiocarbon dating**. The numerical suffix indicates that the atom contains 14 particles within its nucleus as opposed to the 12 within the more common, stable (non-radioactive) isotope.

C-14 dating. see **radiocarbon dating.**

cache. an excavated pit, or mound of stones used to store and/or hide food or tools.

cairn. a mound of stones serving as a monument or marker.

calumet. a ceremonial ("peace") pipe, usually elaborately decorated and often composed of both wood and stone parts.

Campbell strandline. one of the major and certainly the most prominent of the now-extinct beaches created by **glacial Lake Agassiz** comprising shorelines and wave-cut escarpments. It was created between 8000 and 7500 B.C. when the lake occupied the **Manitoba Lowlands.**

cannibalism. the consumption of human flesh by other humans for reasons of dire need or for ritual purposes. In the **archaeological record,** the forceful enlargening of the **foramen magnum** at the base of the skull (presumably for removal of the brains) and the smashing of long **bones** (for the extraction of **bone grease**) are often viewed as evidence of cannibalism. In at least some cases, however, it is possible that while the individual was thus prepared for consumption, they were only symbolically devoured.

canoe. a long, narrow open boat lacking sails and rudder. It is pointed at both ends and propelled by paddles.

carbon 14 dating. see **radiocarbon dating.**

Caribou Lake Complex. a **Palaeo-Indian artifact complex** of the forested region of eastern Manitoba consisting of **lanceolate projectile points,** trihedral **adzes,** and large, asymmetrical **bifaces.** With an estimated age of 6000 to 4000 B.C., this complex is believed to represent the earliest inhabitants of this part of the province who came to rely on the resources of the forests as a result of **Altithermal xerothermy** (Steinbring and Buchner 1980).

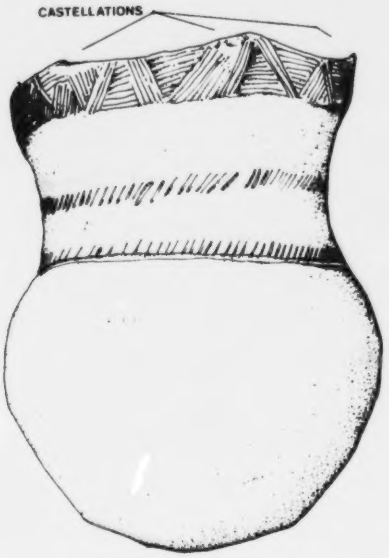
caries. tooth decay. The condition of the teeth of a skeleton is often an important clue to the diet and health of the individual.

carpal. a **bone** of the human wrist, or one of the corresponding bones of the forelegs of other animals.

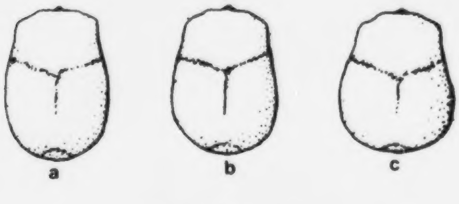
castellation. a projecting or raised section on the rim of a pot.

catlinite. a soft, red, easily worked stone of the Upper Missouri region which was commonly ground and polished into tobacco pipes and engraved tablets. Also known as "pipestone".

celt. an ungrooved **axe** of metal or polished stone.



cephalic index. a measure of the roundness of the skull calculated by dividing the maximum width of the brain case (usually just above the ears) by the maximum length (between the eyes to the back of the skull) and multiplying the resulting fraction by 100. See also **dolichocephalic, mesocephalic** and **brachycephalic.**



Cephalic index:
a) dolichocephalic
b) mesocephalic
c) brachycephalic

ceramic. of or pertaining to **pottery**; a hard material made by drying and baking **clay** or some similar substance.

chalcedony. a waxy, extremely fine-grained form of **quartz** with crystals arranged in parallel strands. Chalcedony was commonly used for tool-making and could be either chipped or ground.

channel flake. see **flake, channel.**

charcoal. carbon formed by heating organic matter in the absence of air; one of the preferred substances for **radiocarbon dating.**

chemistry. the science concerned with the structure, properties, reactions and commercial application of substances.

chernozem. a rich, black organic **soil** which is found in cool or temperate semiarid grassland environments.

chert. a generally impure and commonly coarse form of **quartz.** Chert is usually brown, grey or black and opaque although some specimens may be translucent along a thin edge.

chiefdom. in Service's (1971) scheme, the third most complex kind of society which stands between the simpler, more kinship-based **bands** and **tribes**, and the more governmentally-structured state level societies which some equate with "civilization". As a consequence, chiefdoms share characteristics of both; an individual's family ties remain important, but individuals are ranked within the "family group" and families themselves are ranked relative to one another so that members of the society can no longer be considered equals. At the top of the hierarchy is the chief, often believed to be a direct descendent of the mythical **ancestor** of the entire society. Everyone's status is measured in terms of how closely they stand in a kin relation to the chief. He gains his authority from his position as the focal point for the redistribution of goods from a generally horticultural **subsistence** base although he is not empowered to use coercive force to impose his will. This relatively high degree of organization and productivity allows a high population density and the establishment of major centres. Chiefdoms witness the beginnings of full-time craft specialization, permanent religious practitioners and the establishment of political office. Native North America witnessed several chiefdoms prior to the disruption associated with White Contact in Central America, in the American Southeast, along parts of the Northwest Coast, and arguably, in the American Northeast, particularly Ohio and Illinois.

chinking. a **mortar**, usually composed chiefly of **clay**, used to plaster over gaps in walls or to bind bricks or stones.

chipping station. a restricted area or "floor" within an **archaeological site** which yields stone **flakes** to the virtual exclusion of other kinds of **artifacts**. Such **features** are frequently interpreted as places used for the chipping of stone.

chitho. a disc-shaped **biface**.

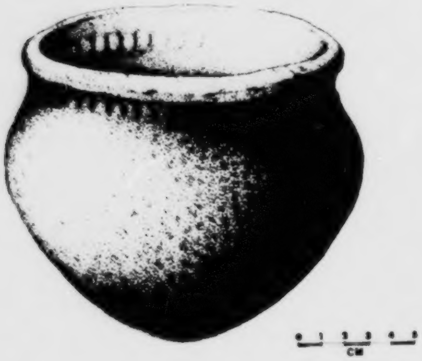
chopper. an **axe**-like tool, generally fashioned from a **cobble** or large **pebble**, and usually worked only on one face.

C-horizon. the bottommost natural level within a soil profile consisting of weathered **bedrock**, oxidized soil material and a general absence of roots. This layer is little affected by soil-forming processes.

chronology. 1. a listing of events in their proper order. 2. the sequence itself. 3. the methodology of placing events in order of occurrence.

clay. extremely fine (less than 0.01 mm in diameter) particles produced by the weathering of certain rocks. Its primary constituent is hydrated aluminum silicate, but numerous impurities, such as **quartz**, mica, calcium carbonate, alkalies, iron compounds, **humus**, and sand may also be present. Clay is plastic when moist, but hardens when dried and is used in the manufacture of **ceramics**.

Clearwater Lake. a lake approximately 17 km north of The Pas, Manitoba which has given its name to a distinctive Late **Woodland pottery** type as well as to the **complex** and **phase** within which it occurs. The pots are round-based with constricted necks and generally outflaring rims. Exterior surfaces are **fabric-impressed** and exterior decoration is usually restricted to a single row of **punctates** which produce interior **bosses**. Lips are generally flattened and decorated in a great variety of ways. Associated tools include side-notched and triangular **projectile points**, **scrapers**, **bifaces**, **gravers**, **celts**, **net sinkers**, slate **grinding stones**, split **bone awls**, long bone **flakers**, bone spatulas, bird bone tubes, bone **beads**, **shaft straighteners** and **red ochre** (Meyer 1978). Believed by many to be the handiwork of the **prehistoric** and **protohistoric** Cree, the Clearwater Lake Complex is widely distributed throughout the **Boreal Forest** of central Saskatchewan, Manitoba and northwestern Ontario.

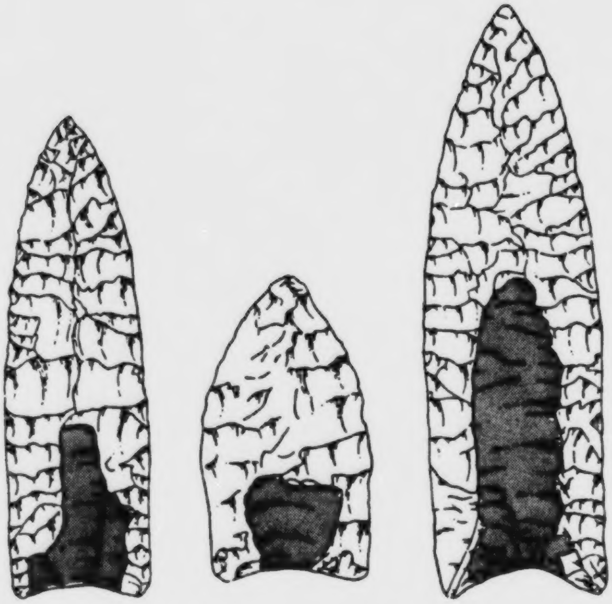

Clearwater Lake vessel

cleaver. a heavy chopping tool, often with a D-shaped outline and a short cutting edge.

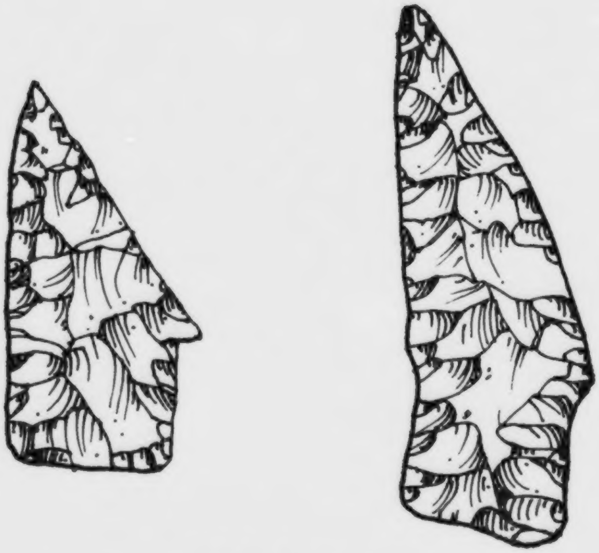
Clovis. a town in New Mexico which has lent its name to a distinctive type of **Palaeo-Indian** or **Early Prehistoric Period projectile point** as well as to the **complex** (also known as the Llano Complex) and **culture** within which it occurs. The highly distinctive projectile points are **concave-based** and highly variable in size, ranging from approximately 3 to 12 cm in length. One or both faces may be **fluted** with the channel **flake** extending one-half or less of the length of the point. Most Clovis sites are either surface finds of isolated projectile points or **kill sites** and hence the full nature of the complex is not known. Associated artifacts include a variety of scraping tools, **blades**, hammerstones, chopping tools and **foreshafts** and **defleshers** of bone (Frison 1978). Clovis points are distributed from the Arctic to Mexico, and from California as far east as Nova Scotia. **Radiocarbon** dated sites range in age from 10,000 to approximately 8500 B.C. Where perishable materials are preserved and an **association** can be demonstrated, **faunal remains** are nearly invariably those of the **mammoth**. Clovis points are rare in Manitoba due to the fact that most of the province was glaciated or beneath the waters of **glacial Lake Agassiz** during the Clovis period. The small area in southwestern Manitoba which would have been available for occupation at that time probably did not support the kind of vegetation upon which mammoths depended for food (Pettipas 1975).

cobble. a medium-sized stone (larger than a **pebble** but smaller than a fieldstone) which has been rounded and occasionally polished by **erosion**.

Cochrane Re-advance. a surging of the **Wisconsinan** ice sheet which occurred roughly 8000 years ago and which is associated with a rise in the level of **glacial Lake Agassiz**.



Clovis points



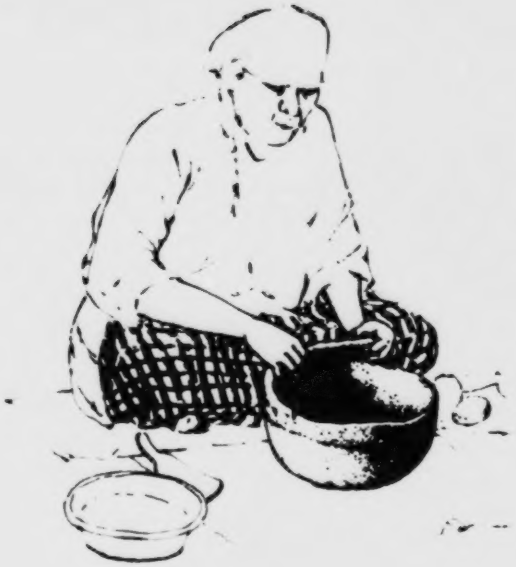
Cody knives

Cody. a town in Wyoming which has lent its name to a distinctive style of **Palaeo-Indian** knife as well as a **complex** consisting of at least two forms of **Plano projectile points** (**Eden** and **Scottsbluff**) and possibly a third (**Alberta**). The knives are either single-shouldered or parallel-sided with a transverse blade. Associated artifacts include a variety of side- and **end-scrapers**, **drills**, **knives**, **spokeshaves**, **gravers**, **perforators** and **denticulates**. Cody Complex sites are more or less restricted to **grassland environments** and where preservation is good, they contain the remains of now-extinct forms of bison. In Manitoba, Cody artifacts occur above the Manitoba escarpment in the extreme southwestern corner of the province. Elsewhere, they have been **radiocarbon dated** between 5900 B.C. and 7900 B.C. (if Alberta is included) or 7100 B.C. if it is not.

cognate word. words in different languages which are similar in terms of meaning and structure by virtue of descent from a common ancestral language.

coil fracture. a **potsherd**, the shape of which reveals that it was a section of one of the coils used to manufacture the vessel. see **coiling**.

coiling. a method of **ceramic** vessel manufacture which involves the stacking of rings of **clay**. The coils are later smoothed-over by hand or paddled to complete the finish and to bind the coils to one another.



Coiling

Co-Influence Sphere. an area within which human groups interact due to trade, conflict, **migration**, the nature of local resources and the manner in which various groups exploited them. As the basis for a research design, the Co-Influence Sphere Model emphasizes interaction as opposed to unilineal **chronology**, and relies upon cultural comparisons beyond the immediate research area as a basis upon which to draw conclusions (Syms 1980).

cold hammering. fashioning metal without the use of heat sufficient to melt it. In prehistoric Manitoba this was restricted to copper and recent evidence indicates that temperatures of up to 1000°C were often applied to render the substance less brittle.

collagen. a protein which occurs in bone and may be used for radiocarbon dating.

collapsed stratigraphy. see stratigraphy, collapsed.

collateral flaking. see flaking, collateral.

collection. 1. the total array of artifacts from a single site or area. 2. the total array of artifacts in the possession of an individual or institution. 3. the gathering of artifacts.

colluvium. a mixture of rock fragments and debris occurring at the foot of a slope.

combed. treated or modified by the application of a toothed instrument of wood, bone, metal, etc. A comb may be used to smooth and/or decorate pottery or to arrange and disentangle hair.

combination (side- end-) scraper. see scraper, combination (side- end-).

communal hunting. any of the various hunting techniques in which a group of hunters co-operate in the taking of game. Examples include bison "jumps" and (bison) pounds.

complex. a grouping of related and/or associated traits, features and artifacts which comprise a complete process, activity or cultural unit. Thus the Laurel Complex consists of the sum total of all evidence in the archaeological record which pertains to Laurel peoples; whereas the Laurel burial complex would only include Laurel burial mounds, grave goods, burial style, etc.

component. the archaeological evidence pertaining to a single group of people (more specifically a single focus) at an archaeological site. A site containing only one occupation is a single component site, while one which was reoccupied is termed a multicomponent site.

composite bow. see bow, composite.

compound bow. see bow, compound.

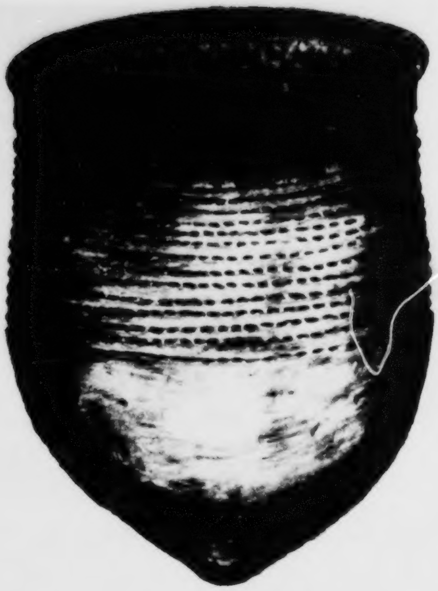
concave. incurvate, as the interior surface of a sphere. The term is typically used in reference to the working edge of a spokeshave or to the "indented" base of a projectile point.

conchoidal. literally, "conch-like"; shaped like the exterior surface of a clam shell. The term is used to describe the fracturing properties of certain kinds of stone. In fine-grained materials such as flint, a fractured surface will exhibit roughly circular ridges radiating outwards from the point of impact.

conoidal. literally, "cone-like". The term is most commonly used to describe the shape of ceramic vessels with pointed bases and straight sides to the shoulder.

contact. see White Contact.

contagious magic. see magic, contagious.



Conoidal vessel

context. the immediate environment of an **artifact** including its **association** with other artifacts and **features** as well as its position within the site **stratigraphy**.

convex. bulging outwards; excurvate as in the case of the exterior surface of a sphere.

coprolite. fossilized, desiccated, or otherwise preserved dung or human faeces. Study of coprolites can yield information on the diet, **environment** and habits of early peoples.

cord-impressed, cord-marked, cord-roughened. the impressing, marking or roughening of the surface of a **ceramic** vessel while the clay is still wet as a means of decorating or shaping the pot. The cord of either vegetal or animal fibre may be used as is or wrapped around a stick or paddle (see **paddle-and-anvil** technique). In Manitoba, these techniques are most common within the Late **Woodland** Period.

core. 1. the stone from which flakes have been removed; the nucleus. A "prepared" core is one which has been specially modified in such a way as to permit a high degree of control over the shape of subsequent flakes. The core itself may be modified into a tool (core tool). **core, conical.** a cone-shaped core with the flat surface serving as the striking platform. **core, polyhedral.** a generally sphere-shaped core with many faces. **core, wedge-shaped.** a core in which flakes are removed from two faces thus rendering it a wedge-shaped appearance. 2. a generally thin, cylindrical sample of soil or tree growth-rings.

corner-notching. see **notching, corner.**

cortex. the weathered, outer surface or rind of unmodified stone; **patina.**

coup. among many **plains** Indian groups, some act of valour such as touching an enemy in battle, by which prestige was conferred upon an individual. **counting coup.** the announcing of one's coups publicly.

cremation. destruction of the bodily remains of the deceased by burning. This mode of postmortem treatment may be favoured for many reasons; to prevent the return of the dead, to protect the deceased from scavengers, or to prevent the transformation of the dead into a harmful entity. Treatment of the ashes is highly variable from one group to another. Cremation seems to have been particularly popular with **Palaeo-Indians** and this is one of the reasons that skeletal remains dating to this period are so rare.

crop mark. differential vegetational growth as a result of buried **features**. Some species of plants are particularly sensitive to various subsurface conditions. For example, cereals will not achieve normal height and will ripen sooner over wall foundations, while over ditches or trenches they will grow taller and remain green longer. Study of these differences, particularly with the aid of **aerial photography**, can reveal such features in remarkable detail.

cross dating. a relative **dating** technique which attributes similar ages to two different **strata**, **components** or **sites** based on the recovery of similar **artifacts** from each; the use of an artifact whose age is known elsewhere, to date a newly-found site.

cultigen. an initially wild plant which has undergone sufficient genetic changes due to nurturing (or conscious selection), so as to be entirely dependent upon humans for its survival; a domesticated plant.

cultivar. a wild plant that is nurtured by humans. Cultivars may thus be found thriving outside of their normal habitats due to irrigation, fertilization or weeding.

cultural anthropology. that branch of **anthropology** that concerns itself with humanity's non-biological **adaptations**. Occasionally it is used synonymously (but incorrectly) with social anthropology.

cultural dynamics. the study of population movements and stability or cultural change and continuity. Cultural dynamics thus includes such phenomena as **migration**, **diffusion**, **readaptation**, population increases and expansions, etc. and attempts to identify the reasons for their occurrence.

cultural resource management. a philosophy which views archaeological resources as heritage resources rather than strictly scientific **data**. For that reason it concerns itself with the identification, inventory, protection and interpretation of archaeological remains for the general public in addition to serving scholarly interests.

culture. 1. the **artifacts**, behaviours and beliefs possessed by a particular people. 2. our non-biological, non-"instinctual" means of **adaptation**; the shared pattern of ideas, beliefs and knowledge which form the basis for social interaction and which are learned by each generation. 3. the term is frequently (and incorrectly) used as a synonym for "society".

culture area. a geographic region within which the occupants are more similar to one another (particularly in terms of **material culture**) than to those beyond its limits. These rather frequently correspond to natural, environmental areas, thus reflecting a shared mode of adaptation to a similar environment. In practice, a culture area is defined on the basis of its centre. The peripheries often share more traits with neighbouring culture areas.

culture hero(ine). in mythology, an animal, person or god(dess) who may be seen as the protector of a people, and/or as being the originator of their culture and circumstance. In Native North American folklore, he/she is frequently also a trickster.

culture history. the placement of the material remains of the **culture(s)** of a region into proper chronological order and the subsequent study of their development.

culture processes. the underlying factors which bring about change in a **culture.** Processual **archaeology** attempts to identify such causes, and tests **hypotheses** thus generated against other archaeological **data.**

cucurbit. the plant family which includes pumpkins, squash, gourds and cucumbers and which occurs in tropical and subtropical regions. Some members of this family were domesticated by Native North Americans.

dart. a (usually) large, **arrow**-like projectile propelled by either an **atlatl** or a blowgun.

data. information; the known facts; a series of measurements or observations.

dating. the process of determining the antiquity of an object or event. **absolute dating.** the determination of the age of an object relative to the present (e.g. 1000 years ago or 43 B.C.). **relative dating.** the determination of the age of an object relative to others of unknown age (e.g. B is older than A but younger than C). Relative dating can thus be used to establish a **chronology** or sequence whereas absolute dating is required to anchor the events firmly in time.

datum point. usually an arbitrarily-defined spot on or near an **archaeological site** which is used as a point of reference for the mapping of the site and for the plotting of the distribution of the **artifacts** which are recovered from it.

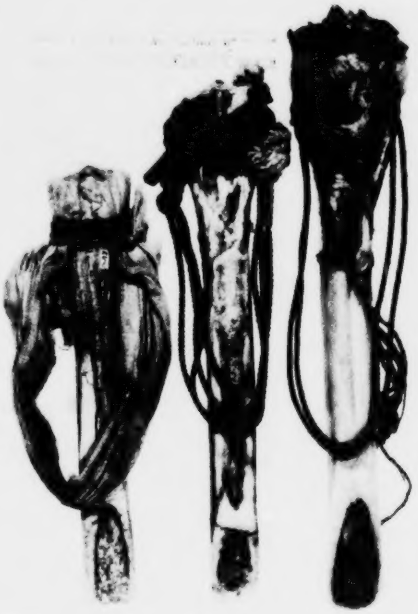
daub. un-tempered **clay** smeared over some rigid structure such as the woven frame (wattle) of a hut in order to keep out draughts. Daub is rarely preserved unless it has been accidentally **fired**.

debitage. debris; waste products or by-products of the manufacturing process. **Lithic** debitage would thus include unused **flakes**, exhausted **cores** and broken **artifacts**.

decortication flake. see **flake, decortication.**

deflation. the removal of surface deposits of **soil**, **sand** or fine gravel by wind action. **Blowouts** are formed as a result of deflation.

deflesher. a chisel-shaped, often toothed implement of **bone**, stone or metal used to remove the fat and flesh from the inner surface of a freshly skinned hide.



Defleshers

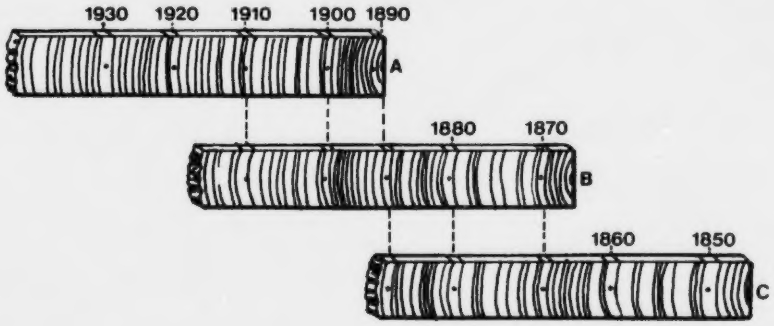
degradation. the wearing away or weathering of a surface by **erosion**.

delta. a triangular-shaped body of land formed of **alluvium** at the mouth of a river.

demography. the study of population **statistics** (population size, number of births and deaths, causes of death, diseases, age distribution, etc.), particularly as a means of making statements of living conditions.

dendrochronology. an absolute **dating** technique employing counts of tree rings. First a tree species from the region is chosen which attains considerable age and most reliably adds one and only one growth ring per year. The oldest living specimen of this species is cut and sampled. A simple count of the rings indicates the number of years elapsed since the initiation of growth until the year of cutting. Next, progressively older wood samples are sought out which hopefully overlap in age with one another and with the modern tree. Such samples may be found as beams in old buildings or simply as fossilized logs in the forest. As the thickness of each ring depends on the amount of rainfall in that particular year, and as the amount of rainfall is essentially random from one year to the next, it is possible to match the outer rings of an old tree with the inner rings of a younger one on the basis of ring thickness. At present, the master tree ring chart (dendrochronograph) for parts of the American Southwest extends back more than 7000 years. Once the master chart has been established for a given region, the process of dating simply involves the matching of the ring sequence of the sample with the corresponding series of ring widths on the chart. If the outer ring of the sample is intact, the number of years elapsed from the cutting of that tree is represented by the number of rings from that point to the modern end of the chart. As rainfall can vary dramatically from one area to the next, the dendrochronograph is only applicable to samples from the area from which it derived. Dendrochronology has recently been used to improve the accuracy of **radiocarbon dating**.

dentalium. a genus of mollusc the shells of which were widely traded throughout Native North America.



Dendrochronology - tree-ring dating

dentate. a form of pottery decoration produced by impressing a toothed object of (usually) bone, wood or stone into the wet clay thus creating rows of small, square depressions. In Manitoba, dentates occur most frequently on vessels of the **Laurel Ware**.

denticulate. 1. having a toothed edge. 2. a toothed stone tool which could have served as a saw.

detritus. see **debitage**.

Devils Lake-Sourisford Burial Complex. a Late Prehistoric Period **complex** known from **burial mounds** in southwestern Manitoba, southeastern Saskatchewan and central North Dakota. Some of the distinctive **artifacts** recovered from these **sites** include small, smoothed **mortuary vessels**, artifacts made of conch shell from the Gulf of Mexico, and tubular smoking pipes. The raw materials used and the style of their artwork indicates that these people participated in a far-flung trade network and were heavily influenced by **Mississippian cultures** to the south. Although direct evidence is lacking, it is probable that these people made their living as nomadic bison hunters (Syms 1979).

diagnostic. significant; distinctive or characteristic; of or pertaining to any **artifact**, **feature** or **attribute** which can provide useful information.

diffusion. the spread of cultural traits from one culture to another. **direct diffusion.** the spread of cultural **traits** by means of multiple hand-to-hand transmissions of adjacent groups rather than a **migration** of the original trait bearers. **stimulus diffusion.** the spread of the general idea of a culture trait which results in the creation of the physical object or development of the custom by the recipient group.

dip net. a fish net attached to a (usually) circular frame and often equipped with a handle.

direct diffusion. see **diffusion, direct**.

distal. 1. the end of a **bone** furthest from the mid-line of the body when the individual assumes a normal standing posture. 2. the end of an **artifact** furthest from the user or observer; the end of a lithic artifact opposite the **striking platform**.

dolichocephalic. long-headed; having a **cephalic index** of less than 75.

dome (-shaped) scraper. see **scraper, dome (-shaped)**.

dorsal. 1. the **convex** (excurvate) face of an **artifact**. 2. that face of an artifact which was furthest from the centre of the core from which it was manufactured. 3. of or pertaining to the back or spinal part of the body.

Dorset. a Middle Prehistoric Period **archaeological culture** or tradition, the **remains** of which have been found in the eastern Canadian Arctic and on the Atlantic coast as far south as

Nova Scotia. In many ways, the Dorset seems to represent a further development of earlier Pre-Dorset adaptations to the arctic environment. Particularly distinctive Dorset artifacts include antler, bone or ivory harpoon heads, three-dimensional ivory and bone carvings of humans and animals, and the increase in the use of grinding as opposed to chipping as a means of manufacturing projectile points and knives. These people pursued a seasonal round which involved the taking of sea mammals in the spring, fishing and caribou hunting inland during the latter part of the summer and fall, and a winter occupation on the sea ice subsisting largely on seals. Dorset culture appears to have disappeared rather suddenly and mysteriously about 1000 years ago with the expansion of the Thule people from Alaska.

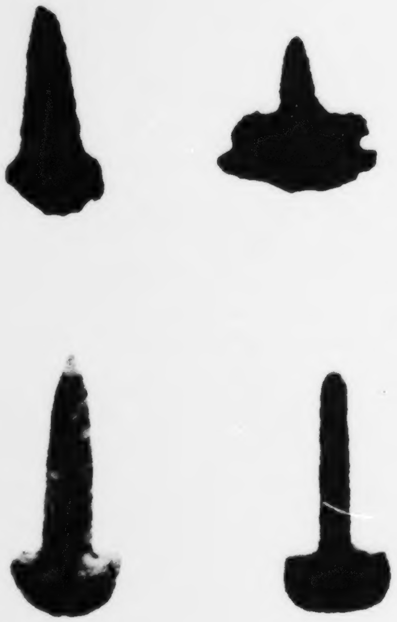
dragged stamp. a kind of pottery decoration found on some Laurel vessels produced by dragging a toothed (dentating) instrument across the wet clay, often in a zigzag fashion. The dragged stamp method is also known as "push-pull".

drawknife. a woodworking tool consisting of a blade with perpendicularly-oriented handles at either end. This implement is also sometimes known as a spokeshave.

drift. material carried by glaciers.

drift copper. pieces of native copper which have been transported from their natural place of origin by glaciers. Drift copper may be found on the ground surface and undoubtedly was used by prehistoric peoples for the manufacturing of ornaments and tools.

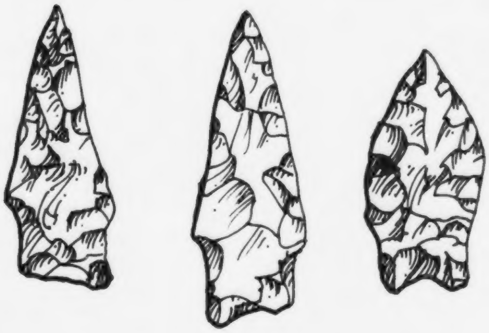
drill. a stone bit attached to a shaft and used to perforate dense materials.



Drills

Duck Bay. a bay on the west shore of Lake Winnipegosis which has lent its name to a distinctive ceramic ware. Vessels are globular in shape with sharply angled necks and shoulders. Surfaces are fabric-impressed or roughened and decoration consists of rows of punctates (Duck Bay Punctate type) or varying combinations of interior notches, punctates and cord-wrapped stick impressions on and near the lip (Duck Bay Decorated Lip type). This Late **Woodland** ware appears most frequently in the **Manitoba Lowlands** (Snortland-Coles 1979).

Duncan. a stemmed **projectile point** style of the **Middle Prehistoric Period** in the Northern **Plains**. Duncan points are included within the **McKean Complex** (Wheeler 1954).



Duncan points

eared. as used in the description of **projectile points** the ear-shaped or "tab-like" projections at the basal corners produced by the combination of a **concave** base and deep, wide **side-notches**.

Early Prehistoric Period. the most ancient of the periods of human occupation in North America and closely equivalent in meaning to **Palaeo-Indian**.

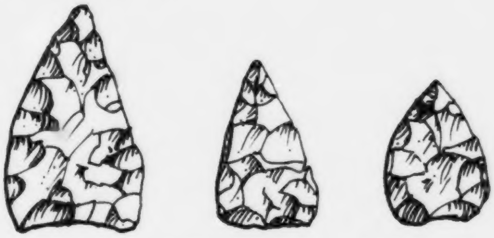
Early Side-notched Point Tradition. a grouping of early **Middle Prehistoric Period complexes** characterized by **side-notched projectile point** styles (generally the first side-notched styles in the region) which have been given a number of different names: **Mummy Cave, Bitterroot, Salmon River, Logan Creek, Simonsen**, etc. These are by-and-large restricted to the Northern **Plains** and neighbouring regions and coincide with the **Altithermal** or **Atlantic** Climatic Episode. A number of **radiocarbon dates** in excess of 8000 years clearly indicate that the authors of this tradition were contemporary with the **Palaeo-Indians**. Where preservation is good, these materials tend to be associated with the remains of now-extinct species of bison.

Early Woodland. see **Woodland**.

earthenware. a type of **pottery** made from common **clay** and **fired** at a temperature of less than 1000°C. The resulting vessel is soft and porous and requires a glaze to render it waterproof.

earthwork. a fortification, **burial mound** or other construction fashioned by the excavation and/or heaping of earth.

Eastern Triangular. a Late **Woodland projectile point** style. The point is isosceles-triangular in outline, approximately 24 mm in length and 15 mm wide. In form it is very similar to (and therefore readily confused with) the many other triangular point styles of the **Late Prehistoric Period** across North America.



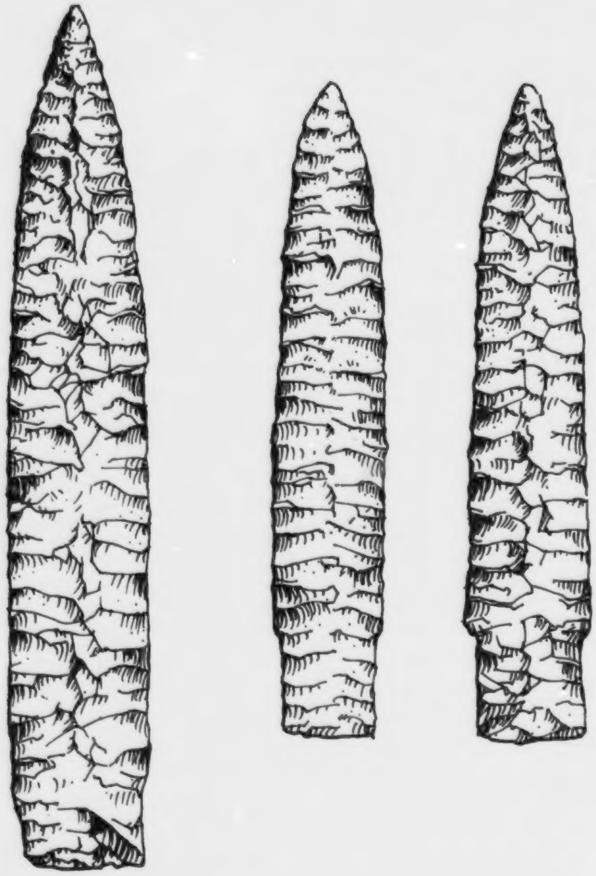
Eastern Triangular points

ecofact. an object or substance found in a site which is of natural origin but which nonetheless provides information pertinent to **archaeology**. Examples might include **fauna, flora, pollen** and **soil**.

ecological niche. the function or position of an organism in a community of organisms.

ecology. the science dealing with the relationship between a living organism and its **environment**.

economy. 1. the full range of human activities dealing with the acquisition. distribution and consumption of **subsistence**-related commodities. 2. the way in which these resources are managed.



Eden points

Eden. a town in Wyoming which has lent its name to a Plano projectile point style of the northwestern plains. Eden points are 8 to 12 cm in length and approximately 1.5 cm wide. They are collaterally and horizontally flaked and thus display a diamond-shaped cross-section. Most have stems that are only slightly narrower than the blade (sense 3) -- in fact in some cases it is produced solely by lateral grinding. Because they are sometimes found in association with Alberta and Scottsbluff points, they are included in the Cody Complex.

effigy. a (generally crude) likeness of a person or animal.

effigy bowl. a (generally ceramic) vessel crafted in the shape of a person or animal.

effigy mound. an earthwork constructed in the shape of an animal or bird. Those of the upper Mississippi are the most well-known in North America. Of probable **Hopewell** affiliation, these may only be a metre or two in height but may be over 100 m in length. Occasionally, human **burials** have been found within them.

effigy vessel. a (generally **ceramic**) container fashioned in the likeness of a human or animal.

eluviation. the process by which fine particles of **soil** are moved downward through the **soil profile** by rain water thus leaving the coarser particles nearer the surface.

enculturation. the process by which the young learn their own **culture**.

end moraine. see **moraine, terminal**.

endogamy. the restriction of choice of spouses to members of one's own group.

end-scraper. see **scraper, end-**.

engraver. see **graver**.

environment. the sum of the external conditions and influences which surround an object or organism -- particularly the ecological and social settings in which people work and live.

eolian. see **aeolian**.

erosion. the wearing away of soil, rock and other deposits by natural forces such as wind, flowing water or ice; weathering.

erratic. a rock which from its shape or composition is entirely foreign to the place where it is found, having been transported by glacial activity.

esker. a **sand** or **gravel** ridge formed by water flowing through or beneath a glacier.

Eskimo. 1. the Native inhabitants of Alaska, northern Canada and Greenland. Traditionally, the Eskimo lived in small bands and followed a seasonal round of activity. These people are known for their remarkable technological and behavioural **adaptations** to one of the world's most trying **environments**. 2. the language of these people.

ethno-archaeology. the approach to **archaeology** which makes use of observations and study of the "archaeological" remains of living peoples in an attempt to gain understanding of the nature of the material evidence associated with specific activities. This contrasts with the study of prehistoric **activity areas** and the derivation of plausible inferences to define them.

ethnocentrism. the judging of other cultures by the standards of one's own **culture**. This common human tendency almost inevitably leads to the conclusion that other cultures are inferior to one's own.

ethnography. the by-and-large descriptive, non-interpretive, non-comparative study of another **culture**.

ethnohistory. the study of the development of a **culture** by means of archaeological, anthropological and documentary evidence.

ethnology. the scientific, interpretive, comparative study of other cultures.

Evans Lanceolate. see **Athapap Culture.**

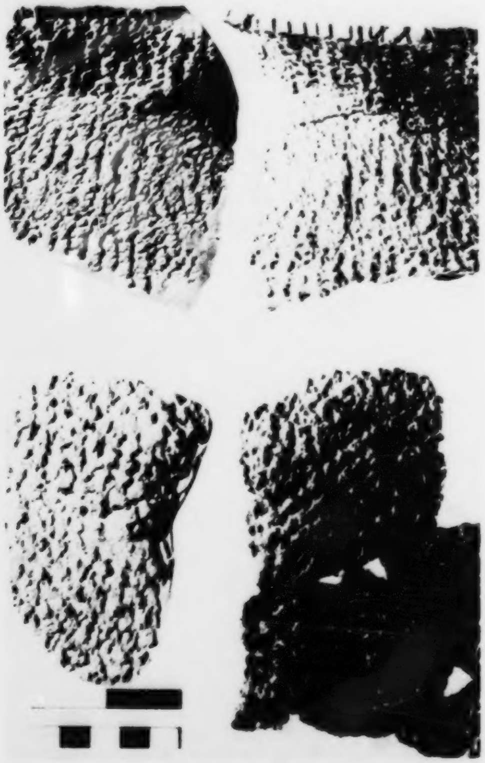
exogamy. the restriction of choice of spouses to people outside of one's own group.

extended burial. see **burial, extended.**

extended family. the nuclear family (husband, wife, children) together with other relatives. Included among the latter are either the wife's married daughters, their husbands and children, or the unmarried children and wives and children of married sons. In general usage, the term may simply imply a group of relatives beyond the nuclear family.

Extended McKean-Oxbow Complex. the term applied to the hypothesized **complex** of southwestern Manitoba which consists of a blending of the **McKean** and **Oxbow** cultures and its persistence until the tenth century **A.D.**

fabric-impressed. a term used to describe the surface finish of many of the Late **Woodland** **pottery** types of Manitoba. Under ideal conditions, it is possible to see the individual woven strands of the fabric which was wrapped around the paddle (see **paddle-and-anvil** method) or which comprised the mould within which the pot was formed.



Fabric-impressed potsherds

fauna. the animal life of a certain place and/or time as opposed to plant life (flora).

faunal analysis. in **archaeology**, the scientific study of animal remains. As different species are adapted to different **environments**, the kinds of animal **bone** found in an **archaeological site** can reveal information about local conditions. For example, the dominance of bison in the faunal record might indicate proximity to **grasslands** at the time that the site was occupied. Because many species bear young only in a certain season, and since an expert can accurately determine an animal's age at the time of death, faunal analysis can also yield information on the time of year in which a site was occupied. The presence of seasonally migratory species may lend additional support to such conclusions. Finally, because most faunal material in sites are the remains of feasts, analysis can reveal information on the diet of the site's occupants and allow estimates of the number of people who may have resided there.

faunal remains. the (usually) hard tissues of birds, fish and animals which survive in the archaeological record.

feature. something distinctive encountered on the ground surface or during the course of excavations which is not artifactual in the usual sense. Its significance may lie not in the object or objects which constitute the feature, but rather in the relationship of the objects to each other. Thus while a cobble, fleck of ash or fragment of burned **bone** would mean little if found in isolation, a concentraton of bone and ash surrounded by a circle of cobbles would suggest a cooking area, and this patterning would constitute the feature. Other examples of features could include **post moulds**, storage pits, a garbage dump, a **cache** of tools, a **flint knapping** area, a collapsed dwelling or a **burial**.

feldspar. a group of rock-forming minerals all of which consist of aluminum silicates and which may contain potassium, sodium, calcium or barium. Feldspars are the chief elements of **igneous** rock.

fill. **sand**, earth or other material which is contained within a **feature** or overlying a **site**.

findspot. the location in which an **artifact** is found.

fire-broken rock. stone which has been fractured by exposure to heat. Generally, a fire fracture is difficult to distinguish from other forms of breakage such as that due to freezing. For that reason other evidence (such as scorching) is required to identify the cause of fracturing.

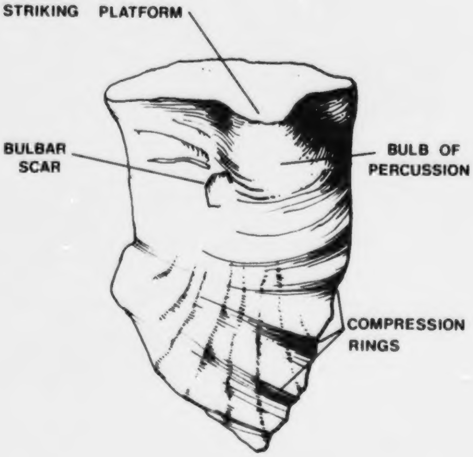
fired. hardened (as in **ceramics**) by exposure to intense heat.

fire drill. a fire-making device consisting of a wooden shaft, the tip of which is twirled against another piece of wood until the friction creates a spark.

fire spall. a **flake** detached by exposure to intense heat.

fishing camp. a site used primarily for the acquisition of fish and possibly the taking of other aquatic species.

flake. a thin chip of stone detached from either a larger flake or a **core** by the application of pressure or a blow (percussion). see **flaking, pressure; flaking, percussion**). Characteristically, manufactured flakes have a **bulb of percussion**, a **bulbar scar** and compression rings radiating outward from the point of impact on the **ventral** face, and the remnant of the **striking platform**. **channel flake.** a long, thin flake detached in such a way as to produce a "groove" on the finished **artifact**. Such artifacts are said to be **fluted**. **decortication flake.** a flake which serves to remove part of the weathered outer surface (**cortex**) of a core. **lamellar flake.** a flake with parallel edges; see **prismatic flake**. **prismatic flake.** a



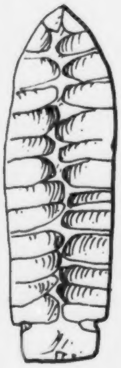
Flake

parallel-sided flake, either three- or four-sided in cross-section, produced from a specially prepared core. Prismatic flakes are also known as blades (sense 4). **waste flake.** one which is produced as a by-product of the manufacture of something else; a discarded unused flake.

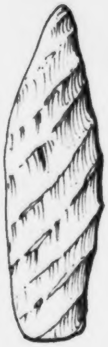
flaker. an implement of **bone** antler, stone or other material, used to remove **flakes** from a core or **preform.**

flake scraper. see **scraper, flake.**

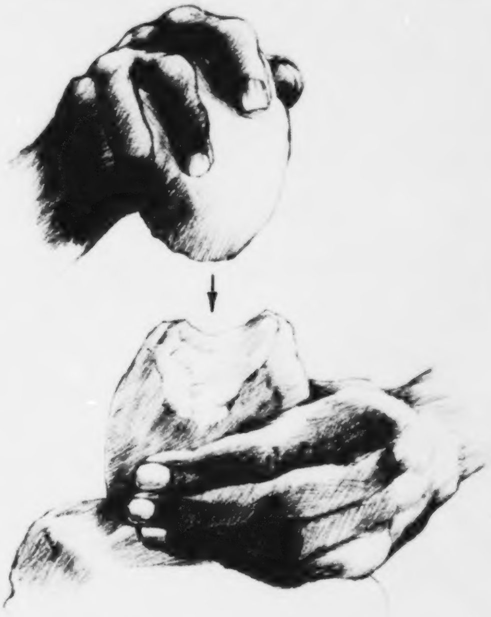
flaking. **knapping**; chipping; the act of removing **flakes** from a **core** or **preform. alternate flaking.** the process of removing flakes from alternate faces along the edge of a tool, thus producing a wavy or sinuous edge. **collateral flaking.** a kind of flaking produced by removal of flakes from the face of a **blade** which begin at either edge and terminate at the midline. This kind of flaking commonly produces a diamond-shaped cross-section. **horizontal flaking.** a kind of flaking in which the flake scars are at right angles to the long axis of the blade. **oblique flaking.** a kind of flaking in



Horizontal Collateral Flaking

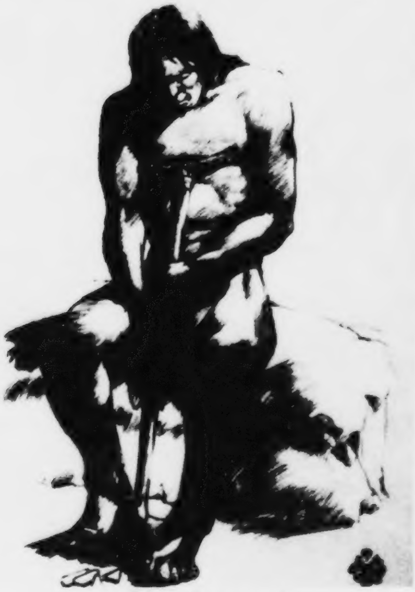


Oblique Transverse Flaking



Percussion flaking

which the flake scars are at an angle to the long axis of the blade. **parallel flaking.** a kind of flaking in which the flake scars are parallel to one another. **percussion flaking.** the removal of flakes by striking. **pressure flaking.** the removal of flakes by the application of pressure. **retouch flaking.** a form of secondary flaking, always accomplished by pressure, which is used to sharpen or straighten an edge. **ripple flaking** a fine form of parallel flaking which gives a surface the appearance of ripples. **secondary flaking.** a fine form of flaking intended to remove surface irregularities, or to sharpen or straighten an edge. **transverse flaking.** a kind of flaking in which the flake scars run across the full width of the blade.



One form of
Pressure flaking

flesher. see **deflesher.**

flexed burial. see **burial, flexed.**

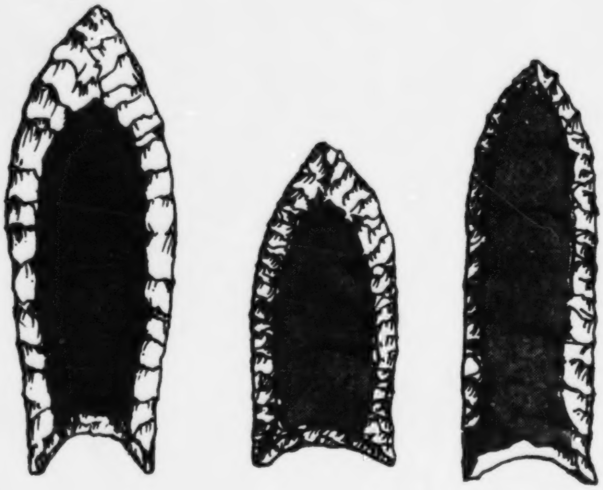
flint. 1. a hard but brittle microcrystalline form of quartz found in sedimentary limestone or in chalk deposits. True flint occurs only in the Old World. 2. any kind of stone which can be flaked.

flint knapping. the flaking of stone for the purpose of manufacturing tools regardless of whether the stone is in fact flint.

flora. the plant life of a certain place and/or time.

floral remains. pollen, seeds, wood charcoal and other plant parts which may be preserved in the archaeological record. Analysis of these can provide information on past environments and subsistence patterns.

fluorine dating. a relative dating technique which uses the amount of fluorine present in bones or teeth as an indication of their age. Living bone has a known and more-or-less constant fluorine content with some minor regional fluctuations due to differences in drinking water. After death, bone begins to absorb fluorine from ground water in the soil in which it is buried. The process continues until a theoretical maximum is reached. Comparison of the fluorine content of two bones, therefore, will allow the archaeologist to determine which is older, or if the two are of approximately the same age. Because the rate of



Folsom points

fluorine uptake varies from place to place, all of the samples to be dated must come from the same site or at least from similar situations. The most famous application of fluorine dating was its contribution in exposing the Piltdown hoax in England. It was found that the human skull was much more recent than the bones of the extinct animals among which it had been planted. In Manitoba, fluorine analysis has been used primarily as a means of verifying series of radiocarbon dates or as a means of helping estimations of age when radiocarbon dating is not possible.

fluted. grooved; chanelled. In North American **archaeology**, the term is most commonly used in reference to the most distinctive trait of **Clovis** and **Folsom projectile points** -- bifacial fluting created by the detachment of **channel flakes**.

fluvium. any river-deposited sediment.

focus. in the Midwestern Taxonomic Method devised by McKern (1939) a focus was defined as a group of **components** with very similar traits. (plural foci).

Folsom. a town in New Mexico which has given its name to a distinctive **fluted projectile point** and to the **Palaeo-Indian Complex** or **culture** of which it is a part. The Folsom Site is of particular significance to the history of American **archaeology** because it was here that the discoveries were made (1926-28) that conclusively demonstrated the contemporaneity of humans with now-extinct species of animals in the New World. The projectile points of the Folsom Complex are among the finest examples of the **flint knapper's** art found anywhere in the world. Ranging in length from 2 to 7.5 cm, Folsom points are either **lanceolate** or parallel-sided in outline, and are deeply **concave** at the base which may give the basal edges an **"eared"** appearance. Occasionally a small "nipple" or projection may be present at the centre of the base. This is a remnant of the **striking platform** created to enable the removal of the channel **flakes** which often extend the full length of each face. Associated **artifacts** include a variety of scraping tools, **gravers**, knives, **grinding stones**, **hammerstones** and **gaming pieces**. Where preservation is good the predominant **faunal association** is bison, thus marking a change from the earlier **Clovis** peoples' focus upon the **mammoth**. Folsom points occur over a fairly broad area, but excavated sites cluster between Montana and Texas. Folsom points are nearly as rare in Manitoba as Clovis and for many of the same reasons; **Lake Agassiz** covered much of the province and the southwestern corner of the province which was available for occupation did not support the kind of vegetation suitable for the animals which Clovis and Folsom peoples hunted. Folsom **radiocarbon** dates range from approximately 9000 to 8000 B.C.

foramen magnum. the large opening at the base of the skull through which the spinal cord passes.

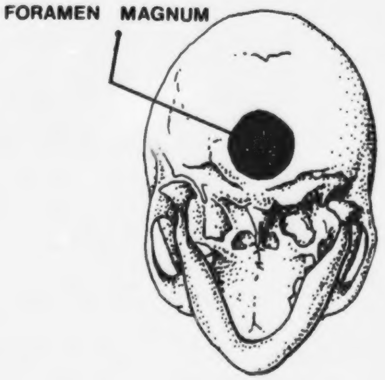
foreshaft. in a compound **dart** or **spear**, a shaft to which is attached the **projectile point** and which in turn fastens to the main or backshaft. The latter falls away after the foreshaft penetrates the prey and thus may be retrieved.

forge. 1. a place used for working metal by heating and hammering; a furnace or **hearth** used for heating metal. 2. to shape metal by heating and hammering.

fossil. a remnant or impression of plant or animal life which is preserved. In strictest terms, fossilization refers only to the loss of fats and gelatine from **bone** and not necessarily the subsequent replacement of these by minerals (**mineralization**). In its most general (and most incorrect) usage, a fossil may be anything dug from the ground.

friable. easily crumbled, as in the case of rock or **pottery**.

frost action. the process by which objects buried in the ground are moved about by the freezing and expansion of water.



gaff. 1. a barbed fishing spear. 2. a shaft with a hook attached intended to aid the landing of large fish.

galena. a lead ore, crystals and fragments of which were widely traded and used for ornamental purposes in Native North America.

gaming piece. an artifact often of stone, **bone** or **pottery** which served as a token or counter in a game of chance or skill.

gardener. a **horticulturalist**; one who relies only upon manpower for the nurture and harvesting of crops.

geochronology. 1. the study of the physical changes in the earth and the ordering of these events into proper sequence. 2. the use of such a **chronology** to date archaeological materials.

geology. the science concerned with the origin, history and structure of the earth.

geomorphology. the branch of **geology** concerned with the origin, development and structure of the earth's **topography** or surface.

gill net. a kind of net suspended vertically in the water which snares fish by the gills as they attempt to swim through it.

glacial Lake Agassiz. see **Lake Agassiz.**

glaciation. the expansion of the polar ice caps and the covering of portions of the earth with large masses of ice and snow. At least four major periods of glaciation are recognized within the **Pleistocene** epoch: the Nebraskan, the Kansan, the Illinoian and most recently, the **Wisconsinan.**

gleysol. a soil type which develops under boggy conditions. It is characterized by a greyish colouration, mottled appearance and a reduced concentration of iron and other elements.

globular. shaped like a globe or sphere. When used in reference to **pottery**, it implies a generally rounded vessel shape.

glottochronology. a technique in **linguistics** used to date the amount of time elapsed since speakers of a once-common langauge separated from one another. If a group of people becomes divided into two due to a **migration** or by some other means, their modes of speech will diverge and after one or two thousand years they will be incapable of understanding each other. Since the rate of change in basic vocabulary is known and fairly constant (about 18% every thousand years) a comparison of the vocabularies of related languages can allow the calculation of the time of divergence.

glyph. a character, symbol or picture carved in stone, metal or some other substance.

gorge. a small tool, often of **bone**, pointed at either end and equipped with a hole near its centre for attachment to a line. It is baited and imbeds itself crosswise in the throat of fish or small game when the line is pulled.

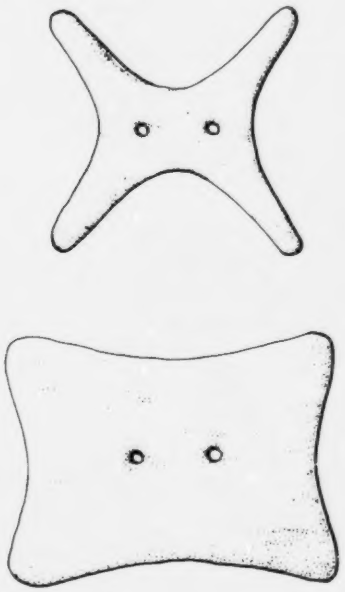
gorget. a plaque-like or crescent-shaped object of stone, wood, shell, etc., often elaborately decorated, and perforated for suspension around the neck.

gouge. a chisel- or celt-like implement with a broad groove ground into one face thus giving the bit a U-shape. These are often interpreted as woodworking tools.

granite. a coarse-grained, light-coloured igneous rock composed of quartz, feldspar and biotite or hornblende.

grassland. an environment, such as prairie, upon which grasses dominate, either naturally or due to human intervention.

Grass River. the name of a tributary of the Nelson which lent its name to a Late Woodland pottery type and the phase within which it was believed to occur. Known only from a handful of sites, Grass River vessels were globular in shape and were impressed with a ribbed-fabric covered paddle. Decoration usually consisted of a single row of circular punctates around the rim. Virtually no other diagnostic artifacts were found in association with the ceramics (Hlady 1971). There is now a consensus that the Grass River ceramics are in fact Selkirk (Focus) Ware and as a consequence the Grass River Phase concept has fallen into disuse.



Gorgets

Shell gorget

grave. a place where the dead are buried.

grave escort. (retainer). an individual who is killed and placed in the **grave** with a person of higher status so that he may accompany the latter to the afterlife and serve him.

grave goods. objects (tools, weapons, ornaments, etc.) placed in the **grave** with the deceased so that he may use them in the afterlife or simply as an expression of affection for the individual.

gravel. a mixture of **sand**, pebbles, and small cobbles which range in diameter from 2 to 200 mm.

graver. a small, sharp-pointed tool used for engraving or **incising** bone, antler, ivory, wood, etc.

grid. a network of lines which divides an area into smaller sections. In **archaeology**, a site is usually gridded into squares before excavations begin. Each square (or **unit**) is numbered, often on the basis of its distance and direction from the site **datum**. One or possibly two people are usually responsible for the excavation of each square.

grinding. the shaping of an object or the dulling of an edge by means of abrasion with another object or substance. **basal grinding.** the smoothing of the **proximal** end of a tool (especially a **projectile point**) so that it will not cut through its bindings after **hafting**. **lateral grinding.** intentional smoothing of the blade edges of a tool (especially a projectile point) so that it will not cut through its bindings after being hafted.

grinding stone. **abrader; shaft smoother; whetstone**; any coarse-grained stone used to sharpen, dull, shape or polish other tools by abrasion.

grit tempered pottery. **pottery** in which small particles of **sand** or stone have been added to the **clay**. **Temper** lends strength to the vessel and helps prevent it from breaking when fired.

grooved maul. see **maul, grooved.**

gunflint. a segment of a stone blade (sense 4) which, when struck against steel, produces the spark which ignites the firearm's powder.

gyttja. a kind of deposit consisting largely of only partially decomposed organic matter.

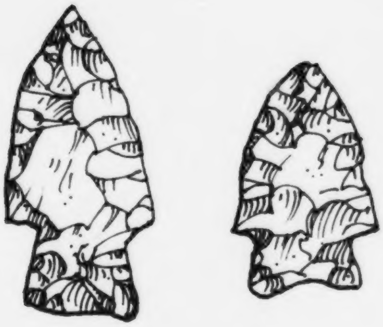
habitation site. an **archaeological site** which served as a residence. Evidence pointing toward this function might include remains of dwelling structures and cooking areas.

haft. the handle of a knife, the shaft of a **spear**, etc.; to equip with a haft.

hafting. the process of equipping a **blade** (sense 2) with a handle; the handle itself together with the bindings.

hammerstone. a rounded **cobble**, sometimes equipped with a groove to facilitate **hafting**. Signs of use may include **pecking** facets or battering at the working end.

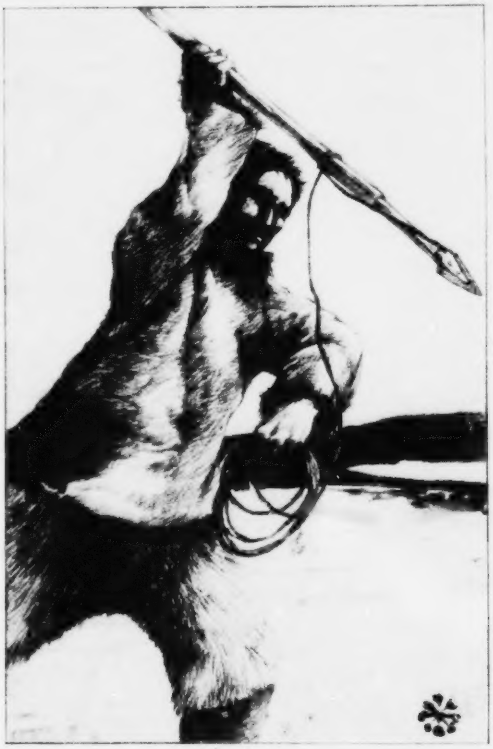
Hanna. a corner-notched. expanding-stemmed, concave-based **projectile point** style of the **Middle Prehistoric Period** in the **Northern Plains**. Hanna points are included within the **McKean Complex** (Wheeler 1954).



Hanna points

hardness. the quality of being resistent to scratching or deformation. Hardness is considered to be a **diagnostic attribute** of **pottery** and is measured by means of the **Moh Scale**. **Aboriginal** pottery in Manitoba ranges from 2 to approximately 3.5 on this scale of 10.

harpoon. a spear with a (frequently) barbed, detachable head. Upon striking the prey, the main shaft falls away and the harpoon head, with a line attached remains in the animal.

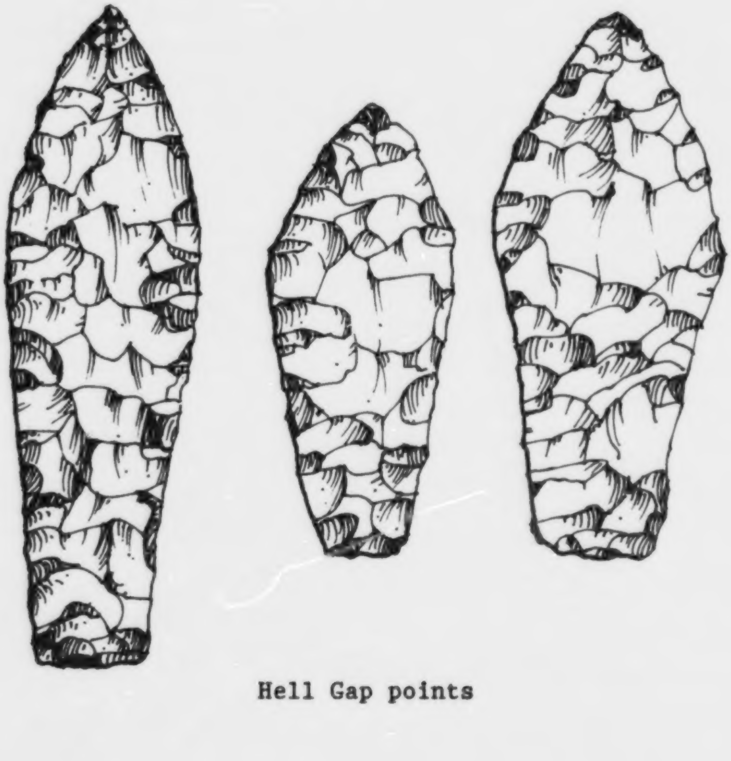


Harpoon

hasp. a fastening device.

hearth. a fireplace; an open area within which a fire has been deliberately kindled for cooking, light or warmth. Such a **feature** may be defined on the basis of ash, **charcoal**, blackened earth, an encircling ring of **cobbles**, **fire-broken rock**, burned **bones** or a baked **clay** floor.

Hell Gap. the name of a valley in eastern Wyoming which has given its name to a **Plano projectile point** style as well as to the **complex** of which it is a part. In some respects, the Hell Gap projectile point is similar to the **Agate Basin** type and the close relationship between the two complexes has often been commented upon. The former style, however, exhibits a base which is constricted to such a degree as to lend the point a stemmed appearance. Lateral **grinding** is heavy along the "stem". The length of these specimens ranges from 5 to 16 cm. **Flaking** may be parallel or more irregular. Other items of the complex include a variety of side- and end-**scrapers**, a number of knife styles including a single-shouldered variety, **burins**, **spokeshaves**, **gravers**, **perforators** and **denticulates**. Hell Gap sites are most common in the Northern **Plains** and adjacent regions. Where preservation is good, the **fauna** found in **association** is predominantly bison of now-extinct species. At



Hell Gap points

one site, it was suggested that natural features such as parabolic **sand** dunes were used to help in the entrapment of a number of animals at once. **Radiocarbon** dates range from 8300 to 7600 B.C. (Frison 1978). A few Hell Gap points have been found in Manitoba but unfortunately, all are surface finds.

hematite. a red to black oxide of iron having variable **hardness** and commonly used as a paint by Native North Americans. Hematite is also known as red **ochre**, particularly in its softer forms or after having been mixed with grease for use as paint.

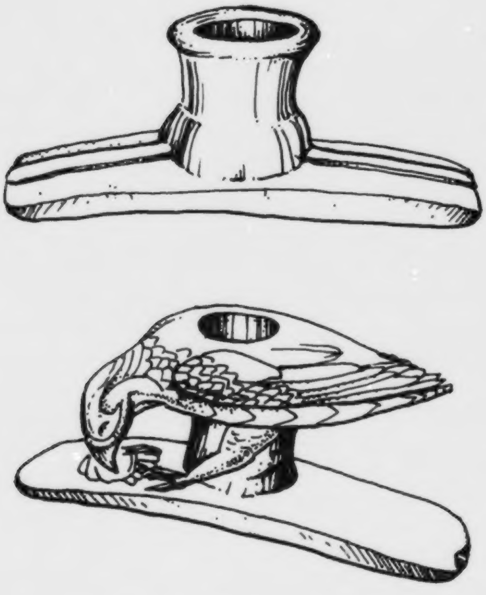
hinge fracture. a kind of cleavage produced by a **flake** which does not run its full length. The point of termination is abrupt, and the flake is rounded on its **ventral** face and sharp on its **dorsal** face at the distal end.

historic archaeology. the **archaeology** of a people for whom there are written records. In North America therefore historic archaeology is the archaeology of people after **White Contact**. In Manitoba, historical archaeologists study such things as early forts, fur trading posts, the residences of early settlers or Indian encampments which yield European trade goods.

Holocene. the most recent epoch of the **Quaternary**; that period of time since the end of the **Pleistocene** or "**Ice Age**" (10,000 or 12,000 years ago) until the present. According to some, the Holocene is not a separate epoch at all -- it is simply a brief warm spell within the Pleistocene. The Holocene is also known as the Recent Epoch.

Homo sapiens. the biological class to which all living human beings belong as well as their immediate **ancestors** including the "Cro-Magnons". Some include the Neanderthals within this species also.

Hopewell. a **Middle Woodland** Period **culture** (or cult) which occupied or "influenced") much of eastern North America. Closely related to Adena, this Ohio/Illinois-centred "**complex**" consisted of log tombs within **burial mounds**, **grit-tempered** utilitarian **pottery**, **effigy vessels** for inclusion with the dead, elaborate **ceramic** figurines, stone platform pipes which often incorporated human and animal likenesses, sheet copper ornaments, earspools, finely made ceremonial knives of **obsidian** and **effigy mounds** -- the latter in the shape of panthers, bears, birds, turtles, and other animals. Hopewell **artifacts** which are believed to have been ceremonial in function are very similar over vast areas while utilitarian objects vary regionally. This has led some to believe that Hopewell is simply a religion, cult or belief system shared by a number of groups with different languages and **subsistence** modes. The sheer ambitiousness in some of the Hopewell **earthworks** and the fineness of their artworks have suggested to some the ranked society, division of labour, and occupational specialization usually associated with farming societies. Direct evidence, however, is not overly convincing. It seems more probable that Hopewell people made their living by hunting, fishing and gathering a wide variety of resources within a rich natural environment.



Platform pipes - Hopewell

horizon. 1. in **pedology**, a horizontal layer within a soil profile which is chemically, physically and/or biologically distinct from other layers (see for example **A-horizon**, **B-horizon**, **C-horizon**). 2. in reference to a specific site, a certain cultural level; for example, the **Agate Basin** horizon of the **Hell Gap Site**. 3. an **artifact** class or style, an art style or other distinguishing cultural trait(s) which occurs over a broad area in a relatively brief period of time. The presence of such objects or styles (horizon "markers") are thus useful as a means of dating a site.

horizontal flaking. see **flaking, horizontal.**

Horner. an archaeological site near the town of **Cody** in northwestern Wyoming which produced **Eden** and **Scottsbluff** **projectile points** and **Cody knives**. The site, **radiocarbon** dated between 7500 and 6500 B.C., is of significance because it appears to represent the **communal hunting** and kill of approximately 200 bison. As used by Irwin (1971), the term also refers to a **phase** which he dates between 7500 and 6500 B.C. and within which he includes the **Cody Complex** as well as **Alberta** points.

horticulture. a **subsistence** method which involves only manpower and a few rudimentary tools in the nurture and harvesting of crops; gardening as opposed to **agriculture**.

humus. a dark brown or black soil material consisting of partially decomposed animal and vegetal matter.

hunting magic. see **magic.**

hydrophyte. a damp-loving plant which grows only under water or in very moist soil.

hypothesis. a proposition or explanation which is advanced, without assumption of its truth, as a basis for further investigation, validation or rejection.

Ice Age. see **Pleistocene.**

ice-creeper. an **Eskimo** invention consisting of a spiked piece of ivory or **bone** which is attached to the soles of mukluks to facilitate movement over the ice.

igloo. an often dome-shaped **Eskimo** structure built by the piling of blocks of snow and intended as a shelter for either people or animals.

igneous. formed from molten lava which has hardened on or below the surface of the earth.

imitative magic. see **magic.**

incipient. beginning; in an initial stage; not fully developed or completed.

incising. producing lines or patterns by cutting into or engraving a surface. As a means of **pottery** decoration, incising refers to the freehand etching of narrow deep lines on the vessel surface with a sharp instrument prior to **firing.**

indigenous. native to, originating in or occurring naturally in a given place; **aboriginal.**

industry. all of the **artifacts** of a single material (**bone**, **stone**, **ceramic**, etc.), made by members of a culture (sense 3).

inhumation. the placement of the dead in an excavated pit beneath ground surface (cf. **burial** sense 2).

iniskim. a fossil ammonite whose natural appearance resembles a bison.

Initial Woodland. see **Woodland.**

in situ. a Latin phrase meaning literally "in place". In **archaeology**, it refers to an **artifact** or other object found in its original position.

interglacial. a warm interlude between two glacial periods.

interstadial. a brief, warm period within a glacial period.

intrusive. an artifact or **feature** found within a feature, **component** or **stratum** of which it was not originally a part.

intrusive burial. see **burial, intrusive.**

intrusive object. an object that is believed to have entered the body of a person and to be the cause of illness and/or death. Such diagnoses are common among many pre-industrial **cultures** worldwide. The cure often consists of the removal of the object by a shaman or sorcerer. Sometimes this is accomplished by (apparently) sucking the object through a **bone** tube (**sucking tube**) and then displaying the object as proof of the cure.

Inuit. 1. an **Eskimo** word meaning literally "The People". 2. the name by which the North American (and Greenland) Eskimo refer to themselves. 3. the language of these people, more properly termed "Inuktitut".

inuksuk. the **Eskimo** word for the likeness of a human made by piling stones. These are often erected in a long V-shaped formation bordering a drive lane. Caribou, mistaking the inuksiuk (plural) for people, can then be stampeded towards the narrow end of the V where a corral and/or hunters await them.

Iroquoian. a family of languages whose speakers originally occupied much of the St. Lawrence River valley and isolated portions of the east-central United States. The major languages within this family include Seneca, Cayuga, Onondaga, Mohawk, Oneida, Wyandot (Huron), Cherokee and Tuscarora.

isolated find. the recovery, usually from the surface, of a single **artifact** with no other artifacts in **association**.

isostasy. or isostatic rebound. the rising of a land surface following the removal of the enormous weight of glacial ice. This phenomenon is of particular importance in Manitoba **archaeology** as the south-to-north tilting of the landscape due to the retreat of the **Wisconsinan** ice sheet influenced the shoreline of glacial **Lake Agassiz** and thus determined the areas which were available for human occupation.

jade. a general term which may refer to either true jade (nephrite) or jadeite. Most **prehistoric** jade objects in Canada originate in British Columbia but some **artifacts** particularly **adzes** were traded into Alberta.

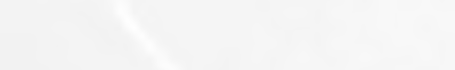
jasper. a non-translucent microcrystalline **quartz** which occurs in a wide variety of colours and which was used for ornaments and chipped stone **artifacts** in prehistoric North America.

juvenile ceramics. generally small and crudely made **pottery** vessels believed to be the product of a child learning the potter's art.

Kame Hills Complex. a Late **Woodland/protohistoric complex** centred in the Southern Indian Lake region in northern Manitoba. Included in the **artifact** inventory are side- and corner-**notched projectile points**, triangular points, a variety of **scraper** and **biface** forms, **whetstones**, **adzes**, **gravers** and grooved **hammerstones**. The **bone industry** consisted of points, **awls** and **beads** and a **harpoon** head made of antler. It is the **ceramics**, however, which are the most distinctive and which provided the impetus to define the complex. Large and small pots and plates were fashioned from **clay** as were bowls, cups and smoking pipes. Although the majority of the pots were of the **Clearwater Lake Punctate** type, variation in vessel shape and in the combination of decorative elements used, served to distinguish the Southern Indian Lake pots from those of neighbouring areas. Dickson (1980) estimates the complex to date from **A.D.** 850 to 1750.

kaolin. a fine white **clay** consisting of decayed **feldspar** used to make porcelain; also known as china clay.

kayak. a double-pointed, decked, skin-covered **canoe** found among some **Eskimo** groups. In some varieties, a waterproof coat covers the cockpit and fastens tightly around the neck and wrists of the traveller, thus rendering the vehicle and clothing contiguous and the kayak virtually unsinkable. A skilled individual can travel in heavy water and breakers in such a craft.



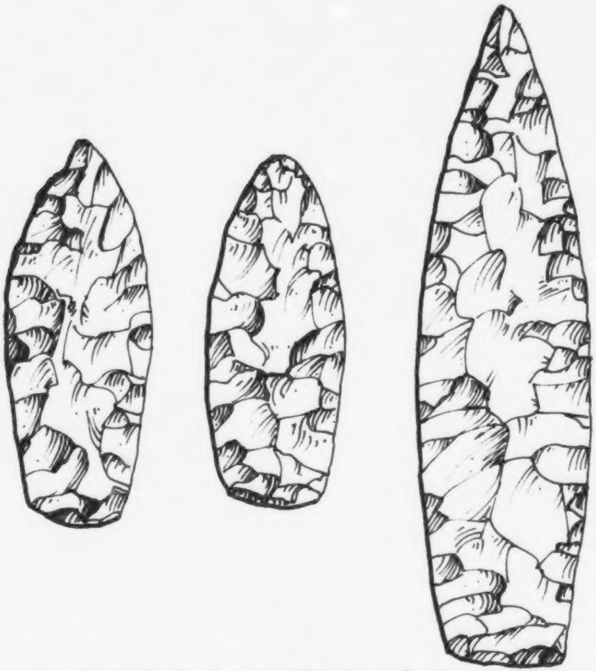
Kayak

keeled scraper. see **scraper, keeled.**

Keewatin Lanceolate. a **projectile point** style defined by Harp (1961) on the basis of his investigations along the Thelon River in the Northwest Territories. As the name implies, these specimens are unnotched and in terms of most particulars, including size, shape, thickness, type of **flaking** and presence and extent of basal and lateral **grinding**, they are essentially identical to **Agate Basin** points. Wright (1972) considers Keewatin Lanceolate points and the **complex** within which they occur to represent an occupation by **Plano** peoples who were ancestral to the authors of his **Shield Archaic** Tradition.

kettle hole. a depression in the ground formed by the melting of a buried block of ice. The debris which formerly covered the ice is thus allowed to settle to the bottom of the kettle.

"killed" artifact. an **artifact** which has been purposely broken so as to release its spirit. Killed artifacts may be found as **grave goods** and the implication is that this was accomplished so that the spirit of the artifacts could accompany the spirit of the deceased to the afterlife.



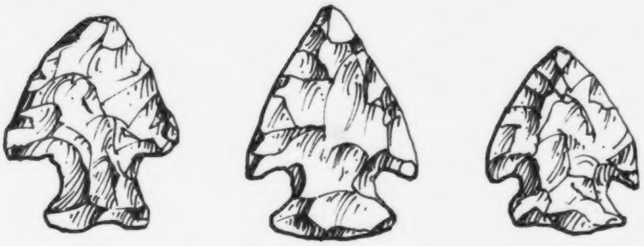
Keewatin Lanceolate points

kill site. an **archaeological site** which was used primarily for the slaughter and usually (at least the preliminary) butchering of game. As one would expect, the **artifacts** commonly found at such sites include **projectile points** and large knives. **Faunal remains** are often extremely numerous and an analysis of these may provide details on the method used to butcher the animals.

kinnikinnick. a smoking mixture of the North American Indians consisting of the bark and leaves of certain plants occasionally mixed with tobacco. Some of the plants used produced a mild narcotic effect.

knapping. the production or shaping of stone **artifacts** by means of pressure and/or percussion **flaking.**

Knife River Flint. brown **chalcedony**; a dark, brown translucent siliceous stone found in the Knife River area of North and South Dakota and particularly favoured for its flaking properties.



Larter points

lacustrine. of, pertaining to, or deposited in lakes.

Lake Agassiz. the multi-staged sea-like lake formed by the meltwater of the **Wisconsinan** ice sheet which dominated most of Manitoba between approximately 10,000 and 5800 B.C. At various times, this massive body of water occupied parts of Saskatchewan, Ontario, North Dakota, Minnesota and even South Dakota. During its lifespan, the southern shore shifted generally to the north in accordance with the erratic but inevitable northward retreat of the glacier. In its wake, it left many **strandlines** and **deltas** including the 6500 km^2 Assiniboine delta in the Carberry area as evidence of an earlier period of stable water levels. Lakes Winnipeg, Winnipegosis, Manitoba and the many smaller lakes of the **Pre-Cambrian** Shield of Manitoba are but remnants of this once immense lake.

Lakeshore. a preceramic **focus** or **culture** defined by Vickers (1950). This concept is no longer used and the materials which Vickers retrieved are now generally attributed to the **McKean Complex.**

lamellar. see **flake, lamellar.**

laminated. composed of or built up by layers.

lanceolate. willow leaf-shaped; tapered at one or both ends. In archaeological usage, the term usually refers to long, slender, unnotched chipped stone **projectile points.**

land bridge. any tract of land which connects two continents thus allowing foot travel between them. see **Beringia.**

Larter. an **archaeological site** on the Red River north of Winnipeg which has lent its name to the distinctive **barbed projectile point** style for which it is known as well as to the **focus** or **phase** within which these occur. This late **Archaic** or late **Middle Prehistoric Period complex** consists of **corner-notched** projectile points named Larter Tanged, unnotched projectile points, or **blanks**, a variety of **scrapers** and knives, **drills**, **gravers**, chisels, grooved **hammerstones** and **sinew stones**. Larter peoples appear to have followed a **seasonal round** of activities centred upon the **communal hunting** of bison, although their diet was supplemented by a variety of other animals as well as fish and shellfish. According to at least one expert (Reeves 1983), Larter derives from the earlier **McKean Complex**. see also **Larter Sub-Phase**, **Pelican Lake**, **Tunaxa**.

Larter Sub-Phase. the Larter **"Phase"** when viewed simply as the southern Manitoba variation of a more widespread and generalized **complex** (**Pelican Lake**) which was distributed over most of the northern **grasslands** during the late **Middle Prehistoric Period** (Reeves 1983).

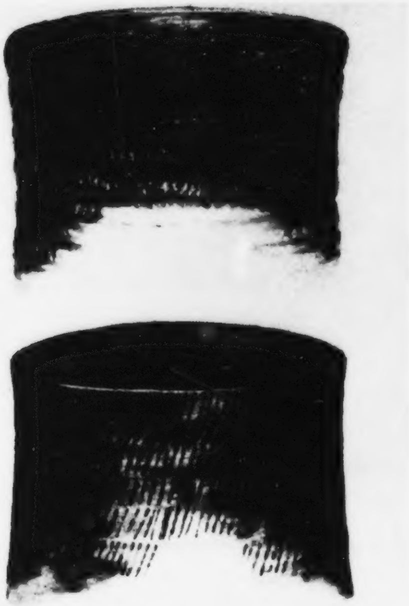
Late Glacial Climatic Episode. the climatic pattern characteristic of the end of the glacial period (roughly 11,000 to 8100 B.C.). During this time, the Manitoba landscape was dominated by **Wisconsinan** ice and later by **Lake Agassiz**. Temperatures to the south of these features tended to average a few degrees Celsius cooler than the present, and vegetational zones accordingly lay far to the south of their modern positions (Wendland 1970).

Late Prehistoric Period. the last and most recent of the three "stages" in central North American **prehistory**. This term is most commonly used for the **plains**, but is roughly equivalent in terms of its dating to the **Woodland Period** of the eastern forests (ca. 200 B.C. to the Historic Period). In many ways, the basic lifestyles remained largely unchanged from those of the earlier **Middle Prehistoric** (or **Archaic**) **Period**. Nonetheless, a number of technological and behavioural innovations are present in the **archaeological record** which allow archaeologists to identify sites of this period with relative ease. These include the manufacturing of **pottery**, the use of the **bow and arrow**, the construction of **burial mounds** and an intensification of the use of **bison corrals** and (**bison**) **"jumps"** as a **communal hunting** technique.

lateral grinding. see **grinding, lateral**.

Late Woodland. see **Woodland**.

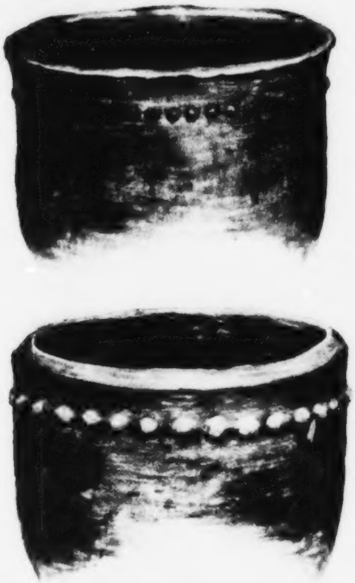
Laurel. a (now-abandoned) town in northern Minnesota near the Ontario border which has given its name to a distinctive **Middle Woodland ceramic ware** as well as the **complex** with which it is associated. Laurel vessels are **grit-tempered** and manufactured by means of **coiling**. Vessel shape is **conoidal** with slightly constricting necks terminating in unthickened lips. Surface finish is smooth except where decorated. Decorative elements include **bosses**, **dentates**, **punctates** and incisions and these are applied and/or combined in various ways so as to produce **pseudo-scallop shell**, **dragged stamp**, and various other patterns. The Laurel **lithic industry** consists of a variety of scrapers and bifaces, ***pièces esquillées***, **netsinkers**,



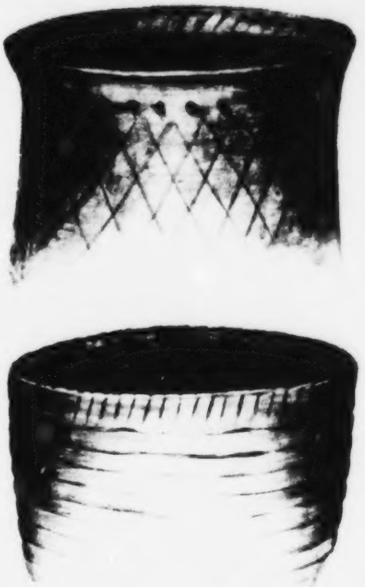
Laurel oblique:
Dragged stamp (above)
Undragged stamp (below)

hammerstones, anvils, smoking pipes, tools for decorating pottery, mortars, pestles, manos, abraders and pendants. The bone antler, tooth, claw and shell industries are extremely well represented, and served as media for the production of numerous classes of tools and a variety of personal adornments. Native copper was also utilized for beads, pendants, chisels, fishhooks and knives. Subsistence was based on a wide range of resources including large and small mammals, wildfowl, shellfish, turtles and fish. Plants were also heavily utilized and it is possibly at this time that wild rice first entered the diets of prehistoric Manitobans.

One of the most spectacular aspects of the Laurel **culture** was the construction of **burial mounds**. The largest of these was orginally 36 m in maximum diameter and 14 m high. Within these mounds were placed the deceased together with meagre **grave goods**. The condition of some of the skeletons was suggestive of (ritual?) **cannibalism**. Laurel sites are distributed in a broad arc from east-central Saskatchewan through central Manitoba to northern Minnesota and northwestern Ontario, and eastwards around the shores of Lake Superior to northern Michigan. **Radiocarbon dating** shows them to date between approximately 200 B.C. and A.D. 1000.

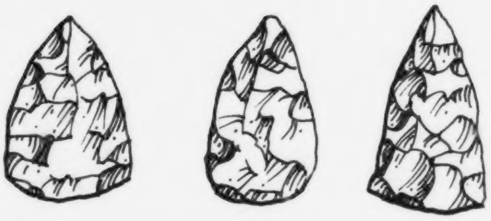


Laurel:
bossed (above)
bossed and punctated (below)



Laurel incised

Laurel Triangular. a **projectile point** style defined by Buchner (1982) which he considered to be **diagnostic** of the **Laurel Phase**. These specimens are isosceles-triangular in outline and range in length from 23 to 33 mm. Bases are slightly **convex** to rounded and virtually all exhibit **basal thinning**. They are distinguishable from more recent triangular forms (such as **Eastern Triangular**) on the basis of the former's larger size alone.



Laurel Triangular points

leaching. the removal of water soluble minerals in **soil** or rock by rainwater. Leaching also accounts for the gradual disappearance of **bone** from **archaeological sites,** particularly when the soil is acidic.

lean-to. a simple shelter consisting of a covered frame leant against the wall of another structure or against some other vertical face.

leister. a fish **spear** with three or more points, usually of **bone** or antler. Each point has a **barb** on the inner side.

lens. in **archaeology,** a **biconvex** (**lenticular**) discoloration in a **soil profile.**

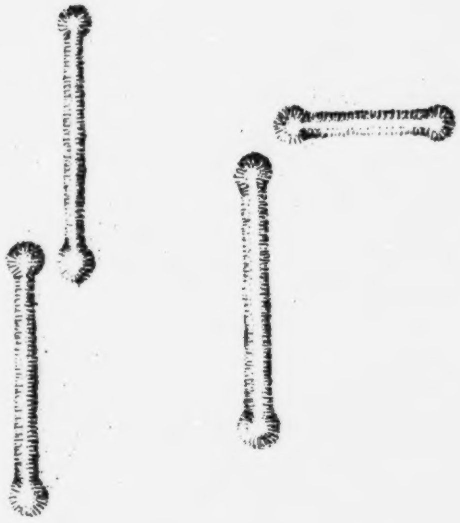
lenticular. shaped like the cross-section of a **lens;** **biconvex.**

lichenometry. the measurement and study of rates of lichen growth. Lichenometry offers a means of calculating the minimum age of any **rock painting** or **petroglyph** which is overgrown with lichen or a **petroform** if the **cobbles** from which it is made were overturned during the construction phase. The latter condition is necessary as lichen grows only on the upper, exposed face of boulders and thus inversion will kill the old lichen and allow new patches to begin growing. If the rate of lichen growth in any given region can be determined (usually by long term observation) then a simple calculation will yield the age of the "new" lichen patch and thus the age of the petroform. Similarly, rock paintings and **glyphs** can theoretically be dated by the amount of lichen on top of them, or by the extent of "new" patches assuming that the rock surface was cleared of "old" lichen before use. Unfortunately lichenometry is not yet sufficiently refined for widespread use by archaeologists.

lifeway. the way of life associated with a **culture**; the technological and behavioural means of **adaptation.**

Lindenmeier. an **archaeological site** in north central Colorado which yielded much material of the **Folsom Complex**. Henry Irwin (1971) defined Lindenmeier as a **phase** consisting of two subphases, the Folsom and the **Midland** which followed it. He considered the Lindenmeier Phase to date from 9000 to 8500 B.C.

linear mound. a long, low, linear earthen embankment which may include a right angle. Rounded expansions often occur at the ends of the mounds and at turning points. These are much less common than their oval and circular counterparts and tend to occur most frequently in southwestern Manitoba and adjacent portions of North Dakota. The largest of these was 800 m in length, over 10 m in width and approximately 1 m in height. The function of these structures is something of a mystery. They do not appear to have been used for burying the dead, and although they are occasionally called "entrenchments", they are not usually in easily defensible locations, and would not be particularly effective for that purpose. It is possible that they fulfilled some ceremonial but as yet unknown purpose.



Linear mounds

linguistics., the science which concerns itself with the origin, development, history, relationships and structure of languages. Skilled use of linguistic **data** can reveal much of direct relevance to **archaeology**. The degree of similarity between two related languages is a gauge of the amount of contact between the two groups who speak them or the amount of time elapsed since the groups separated. **Glottochronology** can put an absolute date on the "split", and occasionally archaeology can trace the route of the emmigrant group. Comparison of terms in modern related languages can yield insights into the nature of the common "mother" language from which they all developed. These may include the kind of technological items the speakers of the now-extinct language used and even the geographic region they originally occupied.

lithic. of or pertaining to stone.

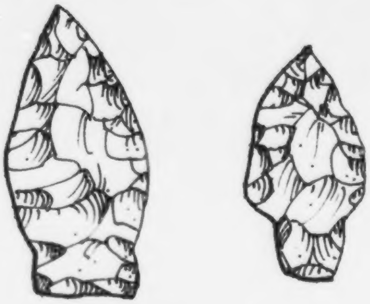
lithic reduction sequence. the entire process of manufacturing stone tools by **flaking** from the removal of the decortication **flakes** to the sharpening or **retouching** of the final product.

living floor. the level within an **archaeological site** upon which a group of people lived. In the absence of specially prepared ground surfaces, living floors may only be defined on the basis of the depths of **artifacts** pertaining to that **component** and the degree of compaction of the floor due to people walking upon it. Often, overlying **soil** will appear to peel off the floor due to the different densities involved. Exposure of entire living floors allows the graphic representation of the various **activity areas** of a site at a specific point in time.

Llano Complex. that **complex** defined by the **association** of **Clovis projectile points** and **mammoth** remains.

loam. a fertile topsoil consisting chiefly of **sand, clay** and **silt** and partially decomposed organic matter.

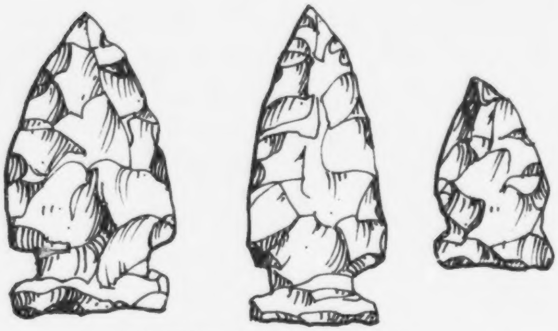
Lockport Stemmed. a poorly defined **projectile point** style associated with **Middle Woodland ceramics** at a site in southern Manitoba (MacNeish 1958). These crudely fashioned specimens are approximately 45 mm in length and 20 mm in width and show a tendency toward asymmetry. The stems are short and straight and the **shoulders** poorly defined. This **taxon** is not generally used by Manitoba archaeologists as so few of these specimens have been recovered.



Lockport Stemmed points

loess. a light-coloured, unstratified deposit consisting of fine-grained **sands, clays** or **silts** which is for the most part laid down by the wind under cold, dry conditions.

Logan Creek. an **archaeological** site in northeastern Nebraska which has lent its name to a widespread **Middle Prehistoric Period complex** whose time-span brackets the warm, dry **Altithermal**. One of the hallmarks of the **complex** is the **side-notched projectile point** which in many areas is the first style to appear after the demise of the **Plano lanceolate** forms. The former range from approximately 17 to 50 mm in length, have triangular **blades**, straight or **concave** bases and are frequently basally ground. Perhaps one of the most **diagnostic traits** of this complex is the practice of manufacturing side-notched **end-scrapers**, presumably from fragments of broken projectile points. Other items in the Logan Creek inventory include **drills**, **grinding stones**, **hammerstones**, **bone awls**, **beads**, needles, **shaft straighteners**, and fishhooks, and **serrated** mussel shells. Sites are widely distributed in the eastern **grasslands**, particularly near the forest edge, in major river valleys, in outliers of the eastern forests or near reliable sources of water. Presumably this reflects the generalized drought conditions which central North America was experiencing at the time. **Faunal remains**, found in **association** with Logan Creek materials tend to be more varied than those of their **Palaeo-Indian** predecessors, although bison seem to have remained the mainstay of these peoples' diets. **Radiocarbon dating** indicates an age for this culture of 6500 B.C. to 4000 or possibly even 3000 B.C.


Logan Creek points

lookout. see **game watch site.**

lug. a projecting part on the rim of a pot intended to assist in holding and lifting the vessel.

lunate. crescent-shaped.

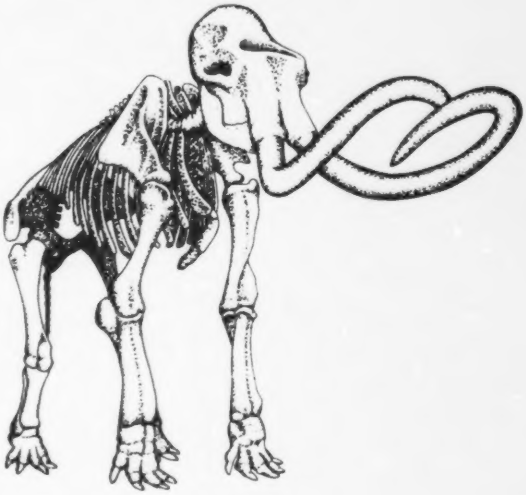
Lusk. see **Angostura.**

magic. the supposed art which attempts to influence people or the course of events by supernatural means. The latter may include the use of incantations ("prayers" or songs), graphic representations, or symbols, and the manipulation of objects. Magical beliefs are difficult to infer from the **archaeological record**, although such items as **sucking tubes** and medicine bags and other ethnographically known items are occasionally recovered. Some interpret certain examples of **rock art**, particularly depictions of large game animals, as forms of hunting magic. Painting or engraving the likeness of a prey species on rock may have served to appease the spirit who controlled that species. Alternately, if the animal was represented with arrows in it, the intent may have been to bring about an event by imitating it. (imitative magic).

magnetism, remnant. the magnetism acquired by substances containing magnetic compounds after being heated beyond the Curie Point (670°C) and then being allowed to cool. The heating brings about the loss of whatever magnetism the substance may have contained. As it cools, however, the metallic particles align themselves in accordance with the orientation of the magnetic field of the earth. (see **magnetometer**).

magnetometer. a device capable of detecting fluctuations in the strength of the earth's magnetic field at pin point locations. As these variations (or "anomalies") are in part the product of various subsurface **features**, a magnetometric **survey** can assist the archaeologist in locating and determining the size and nature of an **archaeological site** prior to excavation.

maize. (Indian) corn, Zea mays. Maize is one of the oldest and certainly one of the most important of the Native American domesticated plants.



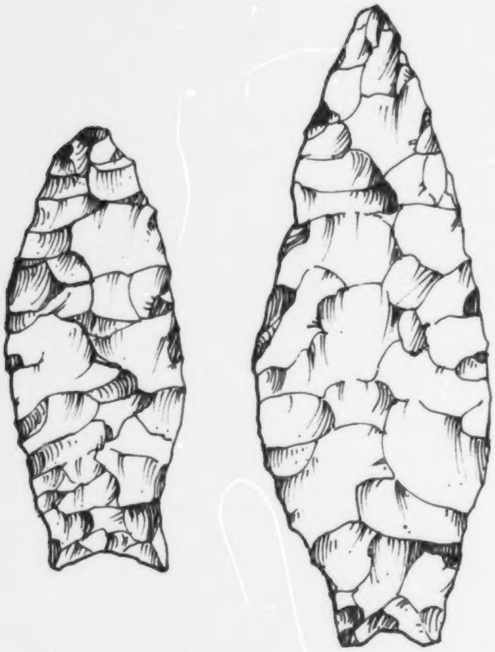
Mammoth

mammoth. any of the now-extinct **Pleistocene** elephants of the genus Mammuthus (or Elaphus). These **grassland**-adapted animals, the preferred prey species of the **Clovis** people, became extinct in the ninth millenium B.C.

Manitoba Focus. the former name for the **Blackduck Phase**.

Manitoba Lowlands. a **physiographic** and vegetational **zone** occupying that portion of the glacial **Lake Agassiz** basin which consists of the interlake and the Red River Valley. This flat, generally poorly-drained land consists of some of the lowest lying terrain in the southern half of the province (approximately 210 to 250 m a.s.l.). Vegetation consists chiefly of black spruce and tamarack with intermittent meadows and swamps, although white spruce, trembling aspen, balsam popular, balsam fir and white birch may occur in some of the better-drained situations.

Manitoba Point. a **projectile point** style defined by Pettipas (1972) on the basis of a small number of surface recoveries from the Swan River area of west central Manitoba. These specimens are **lanceolate** in overall outline and exhibit highly **convex blade** margins. perhaps the most distinctive feature of these points is the set of two or three shallow notches at the basal, lateral edges. Since the time of the original definition, similar points have been recovered as far west as Alberta and as far south as Wyoming. These are usually surface finds, but are often from the same location as **Agate Basin** points. An excavated example of the type from Wyoming was **radiocarbon dated** at 6100 B.C.



Manitoba points

Manitoba ware. the former name for **Blackduck ware**.

mano. a hand-held stone used as the upper stone (**pestle**) in milling.

manuport. an object, usually a **cobble**, which has been moved from one place to another by humans. Manuports need exhibit no other evidence of cultural modification to warrant classification as **artifacts**.

mastodon. any of the now-extinct Pliocene and **Pleistocene** elephant-like creatures of the genus *Mammut* (or *Mastodon*). These browsers (unlike the grazing **mammoths**) subsisted on twigs and leaves and for that reason their remains are found in what would have been forested regions.

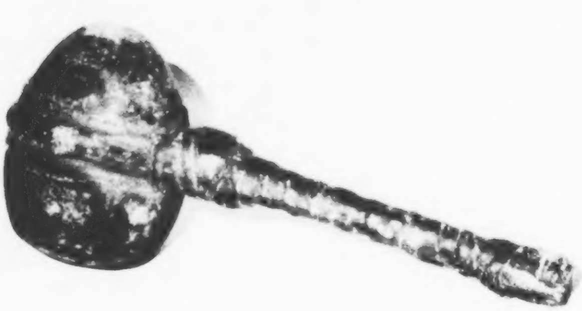
material culture. those visible aspects of a **culture** (such as **artifacts**, **features**, architecture, etc.) as opposed to non-material **traits** (beliefs, attitudes, etc.).

matrilineal. pertaining to the tracing of descent or the transmission of wealth or authority primarily through females.

matrilocal. pertaining to the custom of a newlywed couple's taking up residence in the home, village or territory of the bride's family.

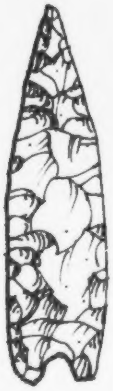
matrix. the rock or soil material in which **fossils** or **artifacts** are found or embedded.

maul. a heavy stone implement with blunted or rounded edges used for pounding and/or crushing. The maul may be grooved to facilitate holding or **hafting**, and may be classified according to the extent to which the groove travels the circumference of the tool (for example, three-quarter grooved maul, full-grooved maul, etc.).



Maul

McKean. an **archaeological site** in northeastern Wyoming which has given is name to a distinctive late **Middle Prehistoric Period projectile point** style and the **complex** with which it is found in **association**. The McKean **Lanceolate** point is narrow, generally leaf-shaped with a deeply **concave**, occasionally notched base. Length ranges from 25 to approximately 60 mm. **Duncan** and **Hanna** projectile points are included within the complex and appear to be somewhat more recent than the more classic lanceolate variety. Other **artifacts** in the McKean inventory include a variety of **scraper** styles including those made on tabular fragments of stone, oval **blanks** or **bifaces**, crude **choppers**, polyhedral **cores**, **bone** scrapers and **beamers** and **gaming pieces** fashioned from coyote teeth. **Radiocarbon dates** on McKean materials from Wyoming may predate 3000 **B.C.** although those from Manitoba range from as early as 1780 B.C. to as recent as 880 B.C. Thus it would appear that the complex originates outside the province and that although there is considerable overlap, McKean is



McKean point

generally more recent than **Oxbow**, but older than **Larter (Pelican Lake)**. Bison is the most common **faunal** element found in association with the complex although it is clear that these people supplemented their diet with a number of other animals, birds and fish. McKean sites are fairly common over much of the northern **plains** and in Manitoba, excavated sites and surface finds are distributed across most of the southern half of the province.

medicine society. a secret society of Native groups of the central Canadian forests and northern **plains**. Meetings were held from time to time in specially constructed secret lodges. The ceremonies, conducted by individuals possessing magical power, centred upon the initiation of new members, healing, and the renewal of the group's contact with the supernatural.

medicine wheel. a circular arrangement of stones with one or more spokes either enclosed by the circle or radiating from it, and occasionally **cairns** centrally and/or peripherally located. These **features**, scattered across the northern **plains** from Wyoming to Manitoba probably served some ceremonial function(s).

memekwesiwak. in Cree mithology, small beings who dwell in the rocks. Some attribute prehistoric **rock paintings** to these creatures.

mesic. pertaining to or flourishing in conditions of medium dampness.

mesocephalic. pertaining to a head of medium width in relation to its length; having a **cephalic index** between 75 and 79.9.

Meso-Indian. see **Middle Prehistoric Period.**

mesophyte. a plant which thrives under conditions of average moisture.

metallurgy. 1. the art and/or science of the extraction of metals from their ores and the working of metals, including the use of such techniques as the application of heat. 2. the science concerned with the study of metals.

metamorphic. of or pertaining to a rock which has been modified from its original structure by exposure to heat and pressure.

metate. the lower, stationary stone used in conjunction with the **mano** for grinding plant foodstuffs.

microblade. a minute parallel-sided **blade** (sense 4) generally produced by **pressure flaking** from a specially prepared core.

microlith. small tools which may be any of a variety of shapes, and which have been produced from **microblades**. Too small to have been used without **hafting**, some were set edge-to-edge in a groove in a **bone** or wood shaft and so served as cutting tools, while others would have been functional as **barbs**.

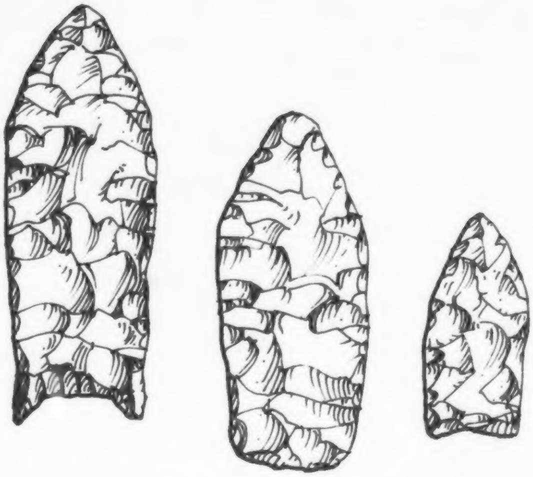
midden. a heap or **stratum** of refuse generally located near a **habitation site**.

Middle Prehistoric Period. the second of the three "stages" in central North American **prehistory**. The term is most commonly used of the **plains** sequence, but is roughly equivalent in terms of its dating to the **Archaic** Period of the eastern forests. Included within this period in Manitoba are the **Logan Creek, Oxbow, McKean** and **Pelican Lake** (or **Larter**) **cultures**. Some would include part of the **Besant Phase** within the Middle Period also as the **bow**, the introduction of which is frequently used to mark the onset of the Late or **Woodland** Period, appears during the Besant times.

Middle Woodland. see **Woodland.**

midewiwin. also known as the Midé or Grand Medicine Society. see **medicine society**.

Midland. a town in west Texas which has given its name to a **Palaeo-Indian projectile point** style, to the **complex** found in **association** with it, and to the (sub?-) **phase** within which it occurs. Originally, Midland points were called "unfluted **Folsoms**" because of similarities in outline shape, manufacturing **technology**, and a tendency to occur in **association** with Folsom points. It is now clear, however, that many of these are much too thin to have been intended for fluting and most consider Midland to be a distinct type. Other **artifacts** in the complex include a variety of side- and end-**scrapers**, knives, **spokeshaves, gravers, perforators** and **denticulates**. Midland sites are more or less restricted to the southern **plains** and are approximately the same age as Folsom. Irwin (1971) considers Midland to be the second (after Folsom) of the two subphases of the **Lindenmeier** Phase. He dates the Midland Subphase at 8750 to 8500 B.C.

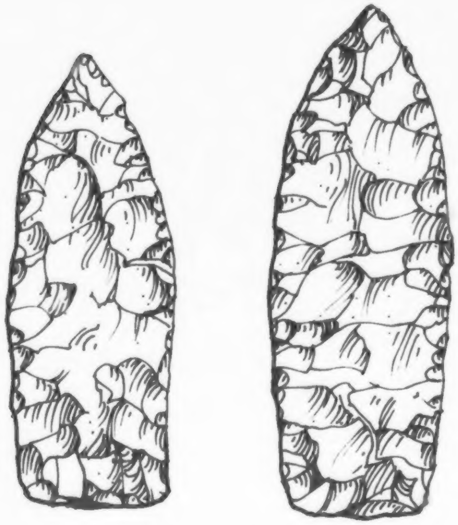

Midland points

Midwestern Taxonomic Method. the system devised by W.C. McKern (1939) for classifying archaeological **data**. It was he who first explicitly defined the **focus, aspect, phase, pattern** and base and how these concepts relate to one another. Not all of these terms remain in use, and those which have survived are used in different ways from that proposed by McKern. This scheme is also (incorrectly) known as the Midwestern Taxonomic System and the McKern Taxonomic System.

migration. 1. the regular movement of animals back and forth between their summer and winter ranges. 2. the movement of a large group of people to a new, permanent residence.

milling stone. a general term for any stationary, lower stone of a grinding mill. In contrast to a metate, however, the mano was used in a rotary, rather than a back and forth motion.

Milnesand. a town in eastern New Mexico which has given its name to a Plano projectile point style. The Milnesand point is superficially similar to the Plainview style, but lacks the deeply concave base of the latter, and has more extensive lateral grinding. The generally lanceolate form tapers gently to a straight or slightly concave or convex base which is thinned by the removal of numerous minute flakes. The faces generally exhibit transverse horizontal flaking and length ranges from 4 to 7.5 cm. Although generally viewed, as a southern plains style, similar forms have been found as far to the northeast as Iowa. At the type site the points were found in association with scrapers and badly decomposed bison bone.



Milnesand points

mineralization. the process of the replacement of organic material (as in the case of the fats and gelatin in bone) by minerals. The end product is an inorganic object, which may therefore survive for immense periods of time in the archaeological record in the shape of the original.

Mississippian. the general name given to the cultural climax of the eastern United States between A.D. 600 and 1600. The core traits include small triangular arrowheads, shell-tempered pottery, and flat-topped earthen pyramids. Some of the latter achieved impressive size; the largest at Cahokia in Illinois stands 30 m high, measures 215m by 330m and covers 16 acres. Thatched temples were constructed on top of the mounds which together with others encircled a plaza. Beyond these lay a palisaded earthen embankment and beyond that, a moat. These mound clusters likely served as administrative-ceremonial centres for wide areas. Most people lived in "rural" areas, practised maize, bean and squash horticulture, and by their efforts supported the divine ruler, the artisans and the governing elite. Sites are located in major valleys of the Mississippi and its tributaries where flooding would regularly refertilize the farmlands. Mississippian craftsmanship in ceramics, stone, copper and shell was superb and in some cases, art styles bespeak influence from or contact with the high cultures of Mexico. One of the most spectacular aspects of the Mississippian are the **artifacts** and depictions surrounding the **Southern Cult** which seems to have concerned itself almost exclusively with death and human sacrifice.

Mistikwas. see **Selkirk.**

mixed site. a (generally) **multi-component** site in which the **artifacts** from the various occupations cannot be distinguished on **stratigraphic** grounds. Although they may be rich in terms of artifact yield, mixed sites may provide little information of significance to the archaeologist due to lack of **provenience** data.

mode. 1. a way of doing or being. 2. in **ceramic** analysis, a combination of decorative elements which commonly occur together.

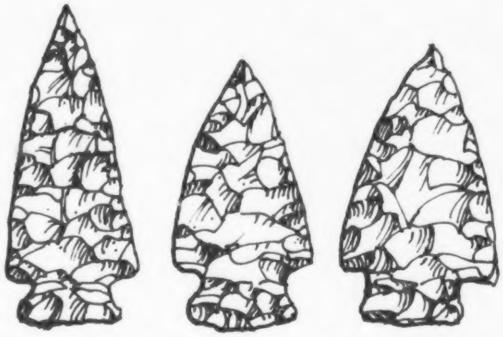
Moh Scale. a method for describing the **hardness** of solids on a 10-point scale ranging from the hardness of talc (0) to that of diamond (10).

moraine. a bank or ridge of earth, **clay**, **sand**, **gravel** and boulders transported and deposited by a glacier. **end moraine.** see **moraine, terminal. terminal moraine.** a ridge formed as above but which marks the maximum extent of the glacial advance.

morphology. the form, structure or shape of an object or organism.

mortar. a (generally) bowl-shaped vessel of some hard material in which objects are crushed, ground and/or mixed with a **pestle.**

Mortlach Sub-Phase. one of the eight regional subphases which comprises the late **Middle Prehistoric Period Pelican Lake Phase.** Mortlach (named after a town 80 km west of Regina) occupies most of the **grasslands** of southern Alberta and Saskatchewan, but is of limited occurrence in southwestern Manitoba. Here, the **Larter Sub-Phase** (or **Phase**) is the dominant representative of this larger classification (Reeves 1983).



Mortlach points

mortuary vessel. a vessel specifically manufactured for inclusion with the dead.

motif. a recurring feature or shape within a design or pattern.

mound. see **burial mound.**

mound builders. any of the prehistoric **cultures** of eastern North America that erected **mounds** (see **Hopewell, Mississippian**).

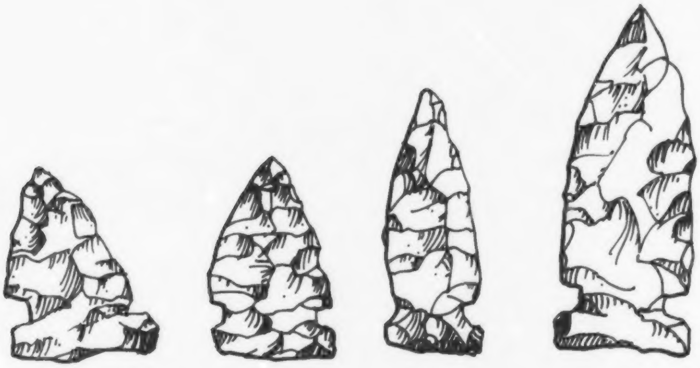
muller. a non-stationary **grinding stone** such as a **mano** or **pestle**.

multi-component site. an **archaeological site** which contains the remains of more than one **culture**. If two or more **complexes** occur in a **stratified site**, there is a possibility that the **artifacts** of each **component** may be distinguished thus providing an excellent opportunity for the study of cultural change over time. If on the other hand, a number of components co-occur in a **mixed site**, the information to be gathered is little more than that from a **surface collection**.

multiple burial. see **burial, multiple**.

Mummy Cave. an **archaeological site** in northwestern Wyoming which has lent its name to an early **Middle Prehistoric Period complex** of the northern **plains**. On the eastern slopes of the Rocky Mountains, the Mummy Cave Complex is heralded by the first appearance of **side-notched projectile points** after the demise of the late **Plano lanceolate** styles. As is the case in the contemporary **Logan Creek** complex to the east, the inventory includes side-notched **end-scrapers** and on this basis, plus other technological similarities, a close cultural relationship has often been suggested. Some sites yield evidence of the **communal hunting** of bison, while at others (including the **type site**), bison remains are conspicuously absent. Such disrepancies may be due to differences in the seasons during which these sites were occupied. **Radiocarbon dating** indicates a timespan from approximately 5800 B.C. to 3400 B.C.

Munsell Scale. a standardized system using coloured chips for accurately describing a colour in terms of its hue, value and chroma.



Mummy Cave points

NaDene. a widespread linguistic **phylum** which includes the Haida, Tlingit and **Athapaskan** families. Of these, only the latter is represented in Manitoba by speakers of the Chipewyan language who occupy the northwestern portion of the province.

Napikwan. a cultural **tradition** of the northern **plains** which in Manitoba consists of the **Besant** and **Blackduck Phases** (Reeves 1970).

natal group. the (residence) group to which one belongs upon birth as opposed to that which one joins by virtue of marriage.

Neo-Atlantic. a central North American climatic episode dating from A.D. 690 to A.D. 1100 which is believed to have been somewhat cooler and moister than the present (Wendland 1978).

Neo-Boreal. a central North American climatic episode, known to some as the "Little Ice Age", which dates approximately A.D. 1550 to 1850. Average temperatures were $1^{\circ}C$ cooler throughout this period than the present.

Neo-Indian. see **Late Prehistoric Period.**

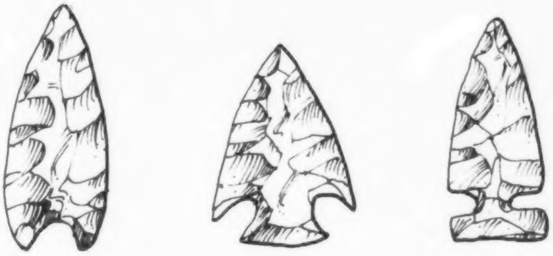
net-impressed. a surface finish of **ceramics** produced by impressing the wet **clay** with a net. Depending upon how this is accomplished, the vessel's surface may be the precise imprint of the mesh or a much more irregular, roughened pattern.

netsinker. a notched or grooved **cobble** attached to a net in order to sink one edge.

non-literate. of or pertaining to peoples who lack a written language.

Northern Transition Zone. the northern part of the **Boreal Forest** which marks the shift from the dense coniferous forest in the south and the open **tundra** to the north. Black spruce is the most common tree species although white spruce dominates on **sand** ridges and floodplains. Swamp and muskeg are common throughout. As one proceeds north, trees become less numerous and more stunted and **permafrost** becomes more widespread.

notching. a V- or U-shaped indentation. **basal notching.** in **projectile points**, a deep often narrow, indentation into the base; narrower and often more pronounced than a basal concavity. **ceramic notching.** the creation of notches, presumably as a decorative element, into the **clay** of a vessel prior to firing. In Manitoba, the notching frequently



Basal-, Corner-,
and Side-notched points

occurs on the lip interior. **corner-notching.** in projectile points, an identation at the junction of the base and blade edge. **side-notching.** in projectile points, an indentation in the lateral blade edge.

N.T.S. abbreviation for "National Topographic Series" maps published by the Canadian Department of Energy, Mines and Resources. The most commonly used in **archaeology** are the 1:50,000 series because of their detail and areal coverage. This scale is equivalent to 2 cm = 1 km.

nuclear family. a family unit consisting of a married couple and their offspring. A grandparent or a spouse of one of the children may be included.

Nutimik Concave. a **projectile point** style identified by Richard MacNeish (1958) on the basis of his excavations in southeastern Manitoba in the early 1950s. These are described as being long (70 to 80 mm) triangular points with slightly **convex blade** (sense 3) edges, **concave** bases, irregular **oblique flaking** and occasionally a slight amount of lateral **grinding**. MacNeish suspected that the Nutimik Concave style may have evolved from earlier **Plano** forms and attributed the former to his **Whiteshell Focus** which he dated at 3000 to 1500 **B.C.** The type and focus terms have fallen into disuse by archaeologists.

Nutimik Focus. the later (A.D. 500 to 1000) of the Middle or Initial **Woodland** cultural-historical periods in MacNeish's (1958) southeastern Manitoba **chronology**. It was later designated the Nutimik **Phase** by Mayer-Oakes (1967). Hlady (1970) finally advocated the grouping of Nutimik with the other Middle Woodland **focus** (**Anderson**) due to the general absence of distinguishing artifactual **traits** and further proposed that this new entity be designated the **Laurel** Phase. The suggestion met with universal acceptance and the earlier term is no longer used.

oblique. diagonal; slanting; lying at an angle.

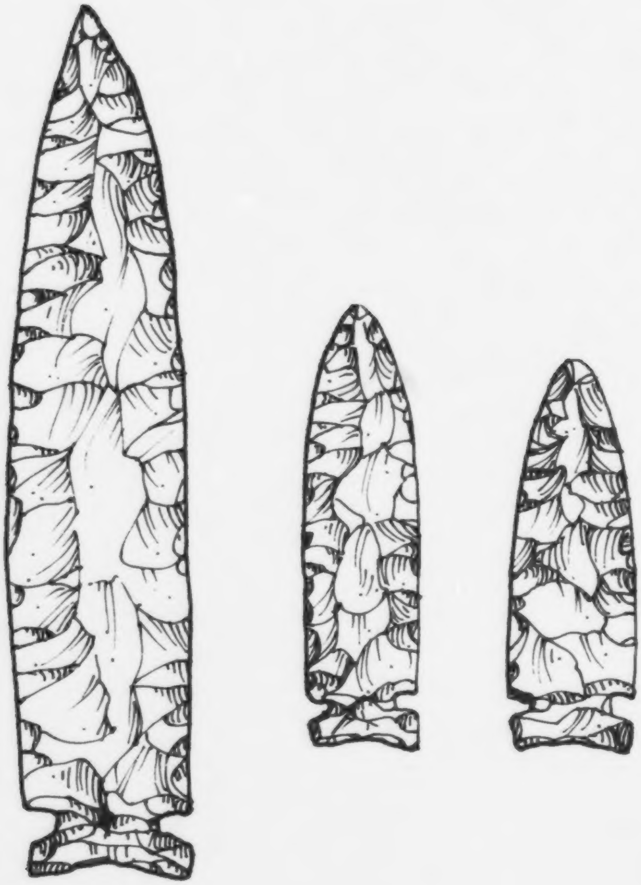
oblique flaking. see **flaking, oblique.**

obsidian. a black, reddish, greenish or brownish volcanic glass which has cooled so quickly from its molten state that no crystals have formed. Due to its excellent **flaking** properties and the incredibly sharp edge it produces, obsidian was a highly prized **lithic** resource throughout the world in prehistoric times, and as a consequence was traded widely outside of the areas of its natural occurrence.

occupation site. see **habitation site.**

ochre. a general term for any of the **clays** or earths containing ferric oxide, silica and alumina. Ranging in colour from yellow through red to brown, ochre was widely used as a pigment for decorative and ceremonial purposes throughout much of **prehistory.**

Old Copper. a late **Archaic complex** or **culture**, centred in the western Great Lakes region, characterized by well-made copper **artifacts.** These include socketed, "rat-tail", **lanceolate**, conical and stemmed **projectile points**, large crescent-shaped objects, woodworking and hideworking tools, fishing equipment, and occasionally, ornamental objects. Associated artifacts include **concave-based side-notched** projectile points with square basal edges termed either **Raddatz** or **Osceola**, **scrapers**, **drills**, "burned" hornstone **blades** (sense 2), "turkey-tail" blades, **bannerstones**, triangular **cache** blades, ground **axes**, shell **beads**, **bone awls**, antler points, notched swan bones, elk antler axes, shell **gorgets** and antler **shaft wrenches.** Much of our information on this complex comes from cemeteries in Wisconsin and as a consequence, the mortuary pattern is quite well-known. Both **primary** and **secondary** (**bundle**) single and **multiple**, **flexed** and **extended** interments are reported and these may occur in either oval or rectangular pits. **Ochre**, copper, **lithic** or **faunal grave goods** may accompany the deceased and the **graves** may have been ceremonially burned over. The **grave escort** or "retainer" phenomenon is also known for this culture. Old Copper peoples appear to have employed a diversified **economy** encompassing the collection of nuts, acorns and perhaps wild rice in the fall, fishing in the spring, summer and early fall, the taking of wildfowl in the spring and fall, the trapping of small fur-bearing mammals throughout the year and the hunting of moose and deer. Old Copper artifacts have been found over much of southern Manitoba although they seem to be most common in the forests of the southeastern quarter of the province. The **association** of finished artifacts, "ingots" of unmodified copper, and waste fragments from tool manufacture suggests that these people imported copper for tool production, rather than receiving



Osceola points

finished tools from outside the province. **Radiocarbon** dates on copper sites argue for a considerable **time-depth** and a substantial antiquity although most would agree that the period from 3000 B.C. to 1000 B.C. marks the peak of Old Copper usage in its "heartland". Radiocarbon dates from eastern Manitoba fall between 2000 and 1700 B.C. although it seems clear that Old Copper implements were made and used for a much longer period than that.

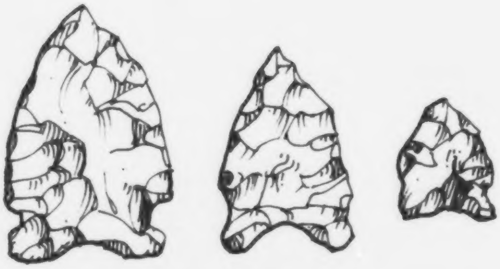
olivella. a genus of small marine snails native to the Pacific coast of North America and elsewhere which were used prehistorically as ornaments and as a medium of exchange.

Osceola. an **Old Copper archaeological site** near Potosi, Wisconsin after which a **side-notched projectile point** was named. Those from the **type site** range in length from 3 to 13 cm, have roughly parallel **blade** (sense 3) edges, and exhibit squared-off bases which are slightly **concave**. Broken points were reworked into smaller points or **drills**. In most respects, the Osceola type is very similar to the **Raddatz** style with which it is generally contemporaneous.

osteology. the scientific study of the development, structure and function of **bones**.

outwash. rubble (**sand, gravel** etc.) deposited by water derived from melting glaciers.

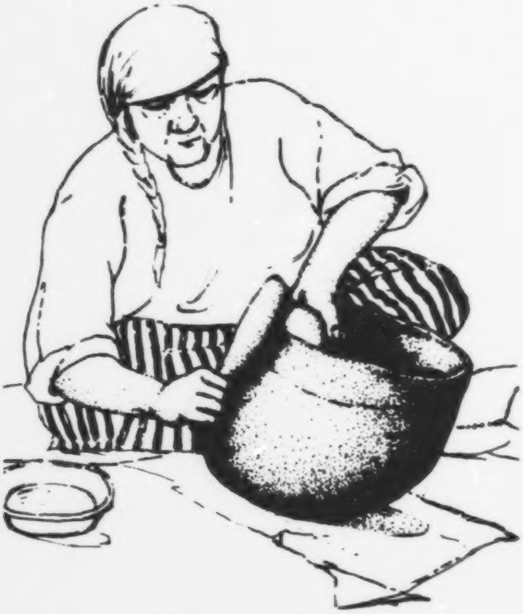
Oxbow. a town in southeastern Saskatchewan which has lent its name to a **Middle Prehistoric Period projectile point** style and the **complex** with which it is found in **association**. Oxbow points tend to be short and squat with bold side-**notching** and a basal concavity which lends them an **eared** appearance. The bases and notches may be ground. Other items in the inventory include "un-notched points" or **preforms**, a variety of **scrapers, knives** and **bifaces, drills, perforators, choppers, hammerstones, anvils, antler awls, bone beamers and flaking tools and drilled clam shells. Although representations of a variety of floral and faunal species may be found in Oxbow** components, **bison appear to have been central to the economy of these people. Oxbow sites are found across the grassland regions of the** Canadian Prairie **Provinces and into the forests to the north.** Most radiocarbon **dates cluster between 3300 and 1000** B.C. **although some would argue that it persists much longer (see** Extended McKean-Oxbow Complex). **It would seem that the oldest sites are those in the grasslands with dates becoming progressively more recent to the north. This has led some archaeologists to believe that over time, Oxbow populations became increasingly dependent upon the resources of the forest for subsistence. The origin of the Oxbow Complex is controversial and eastern as well as western origins have been suggested.**



Oxbow points

Pacific. a central North American climatic episode dating from A.D. 1100 to approximately 1550 which is believed to have been characterized by an increased frequency of droughts in the grasslands and adjacent regions.

paddle-and-anvil. a pottery manufacturing method. An object or the potter's hand (the "anvil") is held against the inside of the roughly formed vessel while the exterior surface is paddled, thus shaping the pot. Additionally, the paddling serves to obliterate seams in instances where the pot was formed by **coiling**. The paddle may be wrapped with a cord or covered with a fabric to prevent it from sticking to the wet clay. This commonly produces a roughened surface.



Paddle-and-anvil

paint stone. a nodule or fragment of **ochre**.

palaeo- (or U.S. paleo-). a prefix meaning "old".

palaeoecology. the scientific study of the **ecology** of a given region in ancient times.

palaeoenvironment. the **environment** of a given region in ancient times.

Palaeo-Indian. a general term referring to either the earliest inhabitants of North America, or the most ancient of the three stages or periods in North American **prehistory**. The Palaeo-Indian Period includes the **Clovis** (or **Llano**) **Complex**, the **Folsom** Complex and (usually) the **Plano** complexes. The peoples of these **cultures** are defined as hunters of big game animals, some of which are now extinct.

palaeontology. the scientific study of the origin and development of organisms through fossils.

palaeosol. a soil formed under earlier **environmental** conditions which subsequently becomes buried by **cultural** or environmental processes.

palaeopathology. the study of the illnesses and injuries of past human populations.

palaeoserology. the study and classification of the blood groups of past human populations.

palisade. a strong, high fence or wall made of logs or stakes and intended for defensive purposes.

palynology. the study of living and fossil **pollen** grains. Pollen is often well-preserved in the **archaeological record** and the identification of species and tabulation of their relative frequencies can aid in the reconstruction of past **environments.**

parallel flaking. see **flaking, parallel.**

Parkdale Eared. a **projectile point** style defined by R.S. MacNeish (1958) on the basis of his archaeological investigations in southeastern Manitoba. This type is no longer generally used, most archaeologists preferring the term "**Oxbow**" for such specimens.

paste. the mixture of water, **clay** and **temper** from which **pottery** is made.

patina. the discoloured "skin" or rind of a stone resulting from exposure to air, sunlight and soil chemicals.

patrilineal. pertaining to the tracing of descent or the transmission of wealth or authority primarily through males.

patrilocal. pertaining to the pattern in which children are raised as part of their father's (as opposed to their mother's) **band.** Patrilocality is often a result of **virilocality** among band societies.

pattern. in the **Midwestern Taxonomic Method** devised by McKern (1939) a pattern referred to a grouping of regional **phases** with a shared mode of **adaptation** and a generally similar **technology.** For example, the **Woodland cultures** of the northeast and the **Middle Prehistoric Period** bison hunting cultures of the northern **plains** would constitute two distinct patterns.

pebble. a rounded stone, smaller in size than a **cobble.**

pecking. a method of shaping stone **artifacts** by hammering them, thus wearing away the surface. Pecking facets are readily discernible on **mauls, axes** and **celts** unless they have been erased by subsequent polishing.

pedology. the study of the formation characteristics and weathering of **soil.** As various kinds of soil form under different conditions, an analysis of the soil at an **archaeological site** can yield clues as to the kinds of conditions which prevailed when the site was occupied.

Pelican Lake. a body of water lying 75 km west of Regina, Saskatchewan which has lent its name to a distinctive late **Middle Prehistoric Period projectile point** style, to the **complex** of which it is a part, and the **phase** within which it occurs. Pelican Lake points vary in shape somewhat throughout their distributional range but all are characterized by **corner-notching.** Bases may be **concave,** straight or **convex.** The lateral edges may be concave, but are more commonly convex. Associated **artifacts** include un-notched **projectile points,** a variety of **scrapers** and

bifaces (some of the latter modified for **hafting**), **drills**, **perforators** and **gravers**. Pelican Lake sites are distributed across the **grasslands** of the Canadian Prairie Provinces and into the surrounding forests. Sites occur as far south as northeastern Colorado. Particularly in the northern areas, Pelican Lake peoples appear to have employed **communal hunting** techniques such as **bison jumps** and **bison pounds** and likely a **seasonal round** of movement following the herds. The **burial** pattern is slowly becoming better known. It is characterized by the painting of the deceased with red **ochre** and their placement, together with some **grave goods** beneath a **cairn**. **Radiocarbon dates** suggest a total time range of approxmately 1200 B.C. to A.D. 400. The dates from Manitoba tend to fall within the earlier half of this range. Reeves (1983) has placed Pelican Lake within the **Tunaxa** cultural tradition following the **McKean** and **Hanna** Phases and ultimately giving rise to **Avonlea**. Additionally, he divided Pelican Lake into eight regional subphases. Of these, only two occur in Manitoba; the **Mortlach Sub-Phase** is restricted to southwestern Manitoba while the **Larter Sub-Phase** is centred in the Red River Valley.

Pelican Lake Focus. a now-obsolete term originally applied to a **ceramic complex** in southwestern Manitoba. The Pelican Lake Focus is unrelated to the **preceramic Pelican Lake Phase**.

pemmican. dehydrated buffalo meat mixed with fat and occasionally berries.

pendant. a personal ornament which has been perforated or grooved to allow it to hang from a chain or thong.

percussion flaking. see **flaking, percussion**.

perforator. see **awl**.

periglacial. of or pertaining to the zone around the margins of a glacier. Typically, such regions are characterized by **permafrost**, and cold-adapted flora and fauna.

periphery. an outlying region; the outermost boundary. For example, Manitoba lies at the periphery of the North American grasslands.

permafrost. permanently frozen ground.

pestle. a club-shaped or cylindrical object used to crush and grind various materials in a **mortar**.

petroform. a geometrical or animal figure formed in outline by the placement of boulders or **cobbles**. These are particularly common in southeastern Manitoba where they are believed to be the work of **Laurel** (and perhaps later) peoples.

petroglyph. a figure inscribed onto a rock surface by **grinding**, **pecking** or **incising**. Although petroglyph sites are fairly common in northwestern Ontario, none are known in Manitoba.

petrograph. a general term for any image produced on stone. Petrograph thus includes both **pictographs (rock paintings)** and **petroglyphs** (rock engravings).

petrology. the science dealing with the origin, composition and structure of rocks.

pH. abbreviation for "potential of hydrogen". In practical terms, pH measurements provide a scale for the determination of acidity. Pure water has a pH of 7.0; lower readings indicate increasing acidity, while higher pH (to a maximum of 14.0) is associated with minimum acidity.

phase. an archaeological **complex** which is sufficiently distinctive so as to be distinguishable from adjacent contemporary complexes, and from those which precede and succeed it. A phase may be viewed as a complex which is bounded in time as well as space.

phosphate test. a chemical test performed on sediments from **archaeological sites**. The decomposition of organic material leaves a phosphate residue which is not readily removed by **leaching**. Thus determination of the amounts of phosphates which occur across a site can reveal which parts of a site were most heavily used. When used in conjunction with archaeological **data**, it can additionally suggest what kinds of activities were pursued in different parts of the site.

phylum. a major **taxonomic** division. In **linguistics** a phylum is composed of a number of families, which in turn comprise various languages, each of which may have numerous regional dialects. In **biology**, phyla are even more all-encompassing. In descending order of inclusiveness the scheme is as follows: kingdom, phylum, class, order, family, genus, species, variety (or sub-species).

physical anthropology. the branch of **anthropology** which concerns itself with the origins, evolution, structure and variation of the biological aspects of human populations.

physiography. 1. physical geography; the study of the earth's crust. 2. the earth's surface; terrain.

pick. an **adze**-like implement which is **hafted** and used for breaking hard ground or rocks.

pictograph. a painting on rock. Unlike **petroglyphs**, rock paintings are numerous in Manitoba, particularly in the eastern and northern parts of the province.

pièce esquillée. literally "stepped piece"; a stone **artifact**, often wedge-shaped, with evidence of **bipolar** battering and reduction. These may have served as wedges for the splitting of **bone** or antler, or they may simply be used up **cores**. In the latter instance, the crushing at one end may be the result of the necessity of resting the core on an **anvil** due to its diminutive size. (plural pièces esquillées).

pipestone. see **catlinite.**

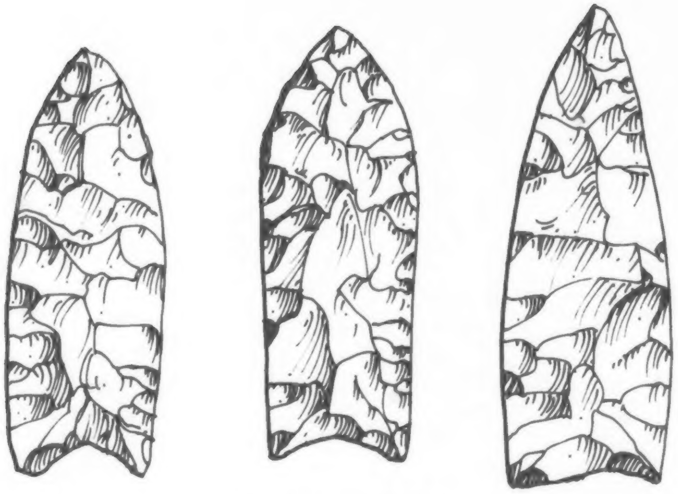
plains. extensive tracts of level or nearly level land. In North America, the plains extend from the southern Canadian **prairie** Provinces to Texas, and from the foothills of the Rocky Mountains in the west to the Mississippi River.

Plains Side-notched. one of the small side-**notched projectile point** styles of the northern **plains** during the **Late Prehistoric Period.** These specimens, which were probably used as **arrowheads**, range in length from approximately 10 to 34 mm and bear small, deep, narrow rectangular side-notches above frequently squared-off bases. Bases are generally straight or occasionally **concave** and at least as wide as the **blade** (sense 3). Basal **grinding** is often present (Kehoe 1973).

Plains Triangular. a **Late Prehistoric Period/protohistoric projectile point** style defined by MacNeish (1954) on the basis of his investigations in southwestern Manitoba. These range in length from 14 to 32 mm and in width from 11 to 21 mm. Maximum length may be equal to or greater than the maximum breadth. The blade edges and the bases are straight or **convex.** This and similar styles are fairly common over much of North America in this general time period.

Plains Village Pattern. a **Late Prehistoric Period** cultural **pattern** comprised of a number of **complexes** along the eastern margins of the North American **grasslands.** Common to all were permanent settlements often protected by ditches and **palisades.** These horticulturalists grew **maize**, beans and squash with the aid of the bison **scapula hoe** in creek and river bottomlands, and supplemented their diets with hunting and fishing and the collection of plants. The artifactual inventory of these people included **pottery** and a greater variety of tools of **bone**, horn, shell and stone than that of their predecessors. The large numbers of underground storage pits is suggestive of a food surplus stemming from a highly efficient exploitation of their **environment.** The earthlodge villages of the Middle Missouri are part of this pattern and have been attributed to the **ancestors** of the Mandan, Hidatsa and Arikara peoples.

Plainview. a town in north-central Texas which has given its name to a **Palaeo-Indian projectile point** style, the **complex** of **artifacts** with which these are **associated** and the **phase** within which these occur. The **lanceolate** points have parallel or **convex** edges and **concave** bases and are irregularly flaked although parallel **flaking** occasionally characterizes the tips. Basal and lateral edges are almost inevitably ground and length ranges from 45 to 77 cm. Associated artifacts include a variety of side- and end-**scrapers, perforators** and **blades** (sense 4). The position of Plainview in the **Early Prehistoric Period chronology** is a matter of some debate. Some place it between **Clovis** and



Plainview points

Folsom (at roughly 9000 B.C.) while others would consider it to be an early member of the Plano complexes which follow Folsom.

plane table. a surveying instrument consisting of a drafting board mounted horizontally upon a tripod. Generally used with a sighting instrument such as an **alidade**, the plane table allows direct plotting of objects onto a map.

Plano. a general term which refers to the late **Early Prehistoric** (or **Palaeo-Indian**) **complexes** of the North American **plains**. Plano thus embraces the numerous non-fluted projectile **point** styles such as **Agate Basin, Alberta, Angostura, Eden, Hell Gap, Manitoba, Midland, Milnesand** and **Scottsbluff** as well as their associated complexes. Most would consider **Plainview** to be a part of this series also. Plano peoples were nomadic big game hunters who made use of the **bison jump**, but they also exploited a range of other animals. Perhaps one of the most important differences between the **subsistence** patterns of Plano peoples and the earlier **Llano** (**Clovis**) and **Folsom** peoples is the occasional recovery of **milling stones** which may suggest a heightened reliance upon plant foods.

platform burial. see **burial, scaffold.**

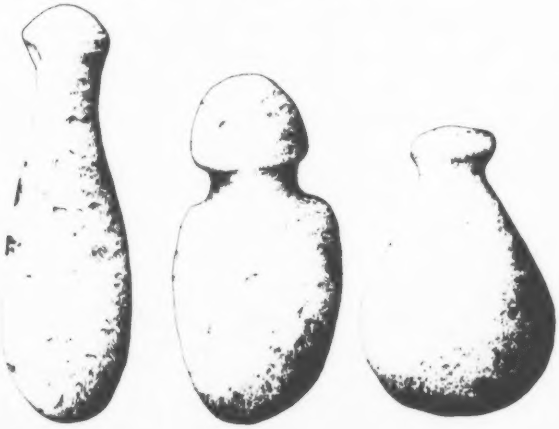
Pleistocene. the geological epoch most commonly known as the Ice Age. In actual fact, the Pleistocene witnessed four major periods of **glaciation** the last of which -- the **Wisconsinan** -- is by far the best known. It was during this period of unstable climate and rapidly changing **environment** that biologically modern people emerged, tools were first made, and human populations entered the New World. The end of the Pleistocene, defined as the date at which the last vestiges of glacial ice disappeared, is well-dated at 10,000 to 12,000 years ago. Its beginning, however, is more problematical and current estimates range from 1.3 to 3.5 million years ago.

plow zone. the mixed surface layer of soil resulting from cultivation. Although no longer **in situ**, cultural material from a plow zone can yield some insights into the original shape and extent of an **archaeological site**.

plumb bob. a weight which when suspended from a **(plumb) line** is used to establish the verticality of walls or to set up a piece of surveying equipment directly over a **datum point**.

plumb line. the line from which a **plumb bob** is suspended.

plummet. a weight which may be used as a **plumb bob**, **netsinker** or for any similar purpose.



Plummets

pluvial. 1. of or pertaining to rain. 2. one of the extended rainy periods which characterized unglaciated areas (such as much of Africa) during times of **glaciation**.

podzol. a greyish, generally acidic **soil** which is heavily **leached** in its upper layers. Such soils are characteristic of coniferous forests.

pollen. the fine powdery fertilizing "dust" produced by seed-bearing plants. Pollen grains are highly resistant to agents of decay and thus are often preserved in the **archaeological record**. The relative frequency of the pollen grains of different plant species can provide clues to the nature of the vegetation which characterized a region in earlier times.

pollen profile. see **profile, pollen**.

pontil mark. a "scar" left on the base of a bottle by the rod (the pontil) that was used to hold it while the upper portion was being shaped.

porphyry. any **igneous** rock characterized by large cyrstals embedded in a finer **matrix**.

post glacial. of or pertaining to a period after the end of **glaciation**, particularly the period following the **Pleistocene** (ie. the **Holocene**).

post hole. the pit in which an upright stake or pole is placed. In the **archaeological record**, these are recognizable as holes filled with rotted wood, or in cases where the post has later been removed, as circular patches of differentially-coloured **soil** (cf. **post mould**).

post mould. a circular patch of earth or **clay** which was packed or tamped in the hole around a post when it was erected (cf. **post hole**).

pothunter. a person who excavates for and/or collects **artifacts** solely for their intrinsic value without regard for their **provenience** or scientific worth.

potsherd. a fragment of broken **pottery**.

pottery. vessels, containers or other articles made of **fired clay**. Pottery is a particularly important object of study for the archaeologist because when it occurs in an **archaeological site**, it is generally the most numerous class of **artifact**. Additionally, because it is such a pliable medium, it may be shaped and decorated in an infinite number of ways. Consequently, pottery is a much more sensitive indicator of change over time or cultural differences between artisans than are more rigid media such as stone. Finally, pottery does not deteriorate with time. Although the pots which the archaeologist finds are almost inevitably broken, the fragments (or **sherds**) will not decompose for thousands of years, even if they are under water. In Manitoba, as elsewhere, the appearance of pottery in **assemblages** is used as a marker of the **Woodland Period**. Locally, this commences in the first few centuries **B.C.** and continues until the Historic period when metal containers replaced more traditional forms. Within this period, three **wares** are recognized: **Laurel Ware** which is the earliest, and the **Blackduck** (or **Manitoba**) and **Selkirk** (or **Winnipeg River Fabric-impressed Wares**. Each are distinguished by different methods of manufacture, shape, surface finish and decoration.

prairie. in North America, that portion of the northern and eastern **plains** occupied by tall grasses. Trees are absent or sparse except along watercourses.

Prairie Side-notched. one of the small side-**notched projectile point** (probably **arrowhead**) styles of the northern **plains** during the **Late Prehistoric Period**. These specimens range in length from 11 to 41 mm and bear large, wide, rounded but shallow side-notches above squared or rounded bases. Bases are generally straight but may be slightly **concave** or **convex**. Generally, the basal width is less than the maximum width of the **blade** (sense 3). Basal **grinding** is sometimes present (Kehoe 1973).

preadaptation. the possession of a biological or cultural trait which confers an advantage to certain individuals under changed environmental circumstances.

Pre-Boreal. a central North American climatic episode dating from 8080 to 7350 **B.C.** which, although cooler than the present, marks the end of the **Wisconsinan**

glacial period and the beginning of the warming trend which culminates at approximately 5000 B.C. (Wendland 1978).

Pre-Cambrian. of or pertaining to the earliest of the geological eras during which time the earth was formed. It was during this time that the Canadian (or Pre-Cambrian) Shield (or Peneplain) which occupies much of central Canada was created. A potassium-argon date from near Bissett, Manitoba, indicates that this 2,000,000 km^2 mass of **granite** solidifed from molten lava approximately 3.5 billion years ago.

preceramic. of or pertaining to that period of time prior to the introduction or invention of **ceramics** in a given region.

pre-Columbian. of or pertaining to that period of time prior to Columbus' first voyage. For the New World this correlates with **prehistory**.

Pre-Dorset. a **Middle Prehistoric Period** archaeological **complex** or **culture** the remains of which have been found in the eastern Canadian Arctic and Greenland. Such typical **Arctic Small Tool tradition artifacts** as **burins**, **side-** and **end-blades** and **microblades** are found in this complex as are a variety of **scraper** forms, **drills** and **knives**. With some stylistic and technological modifications, these classes persist into the more recent **Dorset** Complex. Additionally, some sites contain large tools such as **gouges** and **adzes** which bear witness to the importance of the woodworking **industry**. Judging from the distribution of sites and the classes of artifacts found within them, it seems possible that these people employed a **seasonal round** of activity which focused upon the taking of sea mammals, caribou hunting and fishing, alternating with inland caribou hunting. While on the coast, Pre-Dorset populations lived in circular or square skin-covered houses which in the **archaeological record** are documented by the arrangements of boulders used to hold down the edges of the tents. These immigrants from the western Arctic occupied northern Manitoba from approximately 1500 to 500 B.C. Some archaeologists identify this culture as the **ancestors** of the modern **Inuit**.

preform. see **blank**.

prehistory. 1. the study of the **cultures** and events which occurred in any given region prior to the time for which written records in alphabetic script are available. As a consequence history begins at different times in different places. As Native Manitobans did not use alphabetic writing in pre-contact times, prehistory here ends with **White Contact**. 2. that period of time before White Contact.

pressure flaking. see **flaking, pressure**.

primary burial. see **burial, primary**.

Primary Forest Efficiency. a **subsistence** strategy which involves the selective harvesting of nuts, berries and other vegetables and possibly fish and shellfish as these become seasonally available, and supplementing these with the continuous year-round hunting of land and water animals (Caldwell 1958). Such a means of exploiting the natural **environment** is particularly efficient in terms of the amount of energy expended and the nutritional value and diversity of the food collected. The diversity of the resource base also allows people who pursue such a strategy greater security in the event that one particular resource becomes depleted. Primary Forest Efficiency often results in a **seasonal round** of activity which is more restricted in its geographical extent than that of a **culture** which relies more heavily on a single, migratory big game species such as bison. It also allows people to become more intimately familiar with the resources available within their own territory. Primary Forest Efficiency is often used as a major defining characteristic of the **Archaic** Period in eastern North America. Thus the regional diversity and the proliferation of **complexes** in this region at this time is ultimately explicable in terms of the increasing regionalism which resulted from restricted wandering after the close of the **Palaeo-Indian** Period.

prismatic flake. see **flake, prismatic.**

Proboscidea. the order to which modern elephants as well as the now-extinct **mammoth** and **mastodon** belong.

profile. a side or vertical view. **pollen profile.** a graphic representation of the changes in the relative frequencies of various species of pollen over time. **soil profile.** the exposed wall of a trench or pit which shows the **stratigraphy.**

projectile point. the detachable tip of an **arrow, spear, harpoon** or **dart.** In various times and places, projectile points have been made of metal, **bone**, wood or stone. The latter are the most common in the **archaeological record** largely because they are non-perishable. Stone points may be **unifacial** or **bifacial** and may be manufactured by **flaking** or **grinding.** The **proximal** end may be modified to facilitate **hafting.** Included here are such attributes as **basal thinning** and side- and **corner-notching. Lanceolate** projectile points are by definition unnotched, but may bear basal and/or lateral **grinding** so as to prevent the sharp **blade** (sense 1) edges from cutting through the bindings. Because of the variety of forms which these weapons may take, the care that was often taken in producing them, and because of the frequently rigid adherence to a particular style by members of a **culture**, projectile points are particularly useful time markers for the archaeologist. This is particularly true for the **Paleo-Indian (Early Prehistoric)** and **Archaic (Middle Prehistoric) Periods** as peoples of these times did not possess the ceramics upon which the archaeologist relies so heavily to determine age and cultural affiliation.

proto-Algonkian. 1. the theoretical single language from which all modern **Algonkian**

languages (such as Micmac, Delaware, Ottawa, Shawnee, Cree, Ojibwa, Blackfoot, Cheyenne, Arapaho, etc.) derived. 2. a speaker of this language.

protohistoric. of or pertaining to the time immediately preceding the advent of written documents by Europeans in a given region. In practice, this is the period of time from the arrival of Europeans to North America, until the time they produced written records of the area in question. Thus a protohistoric **site** might contain European **artifacts** which had been acquired through trade long before actual direct **contact** had been made.

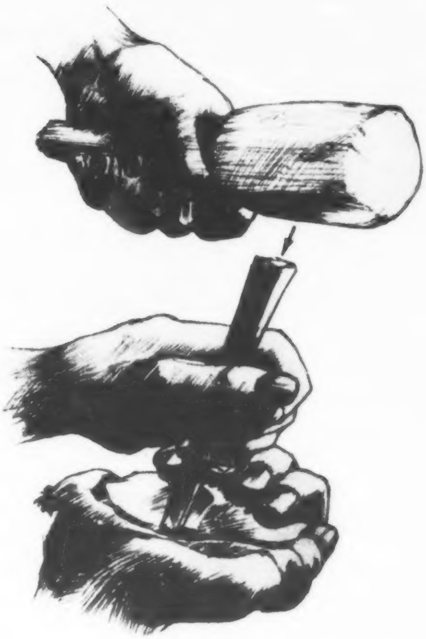
proton magnetometer. see **magnetometer.**

provenience. the place of origin of an **artifact** and its spatial relationship with other artifacts and **features**; **context.**

proximal. 1. the end of a **bone** nearest the midline of the body when the individual assumes a normal standing posture. 2. the end of an **artifact** nearest the user or observer. 3. the end of a **lithic** artifact which was originally a part of the **striking platform** of the **core.**

pseudo-scallop shell. a **pottery** decoration made by pressing the edge of a notched stick, **bone** or stone into the wet **clay** before the pot is **fired.** The impression resembles the edge of a scallop shell.

punch. an intermediary **flaking** tool one end of which is placed on the **core** while a sharp blow is applied to the other. This not only allows the **flint knapper** to apply force with pinpoint accuracy, but also permits fine control of the angle from which the force originates.



Punch

punctate. a decoration on **pottery** produced by pressing the end of a stick or similar object into the wet **clay** before the vessel is **fired.** The raised or mounded feature formed on the opposite side of the vessel wall is a **boss.**

push-pull. see **dragged stamp.**

quarry. an **archaeological site** from which copper, stone or **clay** was acquired by either surface collection or mining.

quartz. a very hard (7 on the **Moh Scale**), common mineral composed of silicon dioxide in a hexagonal crystalline form. Present in most rocks (particularly **granite** and **sandstone**), this colourless, glasslike stone exhibits **conchoidal** fracturing properties thus lending itself to **flaking**. **vein quartz.** quartz which occurs naturally as a vein within a **matrix** of some other mineral.

quartzite. a mineral formed from **sandstones** which have been subjected to considerable heat and pressure. This **metamorphic** rock may be coarse- or fine-grained, depending on the nature of the parent material and may be virtually any colour.

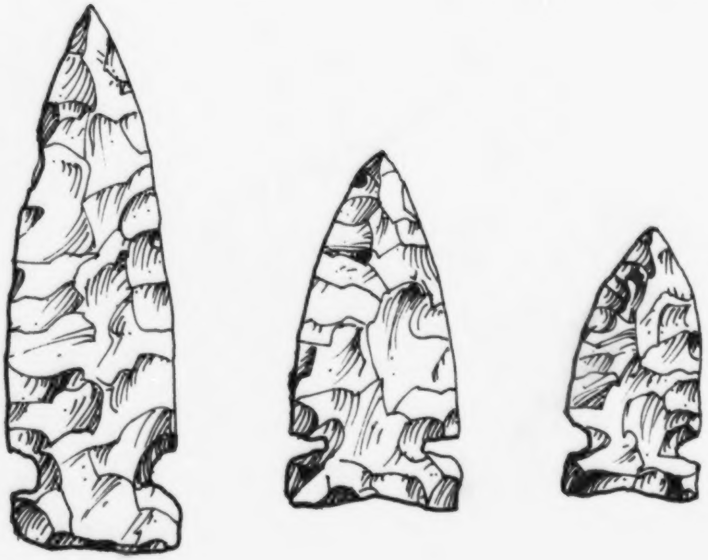
Quaternary. the most recent of the geological eras or periods which incorporates both the **Pleistocene** and **Holocene** (Recent) Epochs.

quern. a stone used for grinding corn or grain.

quiver. a container for **arrows** or **darts**.

Raddatz. an **archaeological site** in central Wisconsin which has given its name to an **Archaic side-notched projectile point** style. The Raddatz Side-notched type ranges in length from 38 to 64 mm and characteristically bears U-shaped side-notches close to the base which are set at right angles to the long axis of the **blade** (sense 2). The lateral edges of the bases are squared-off while the bases themselves are usually straight and bear evidence of **grinding**. Only a small minority are either slightly **concave** or **convex**. The blade (sense 3) edges were originally nearly parallel to one another although they may converge more rapidly to the tip as a result of the **reworking** of broken specimens. In many respects, Raddatz points are similar to **Osceola** although the latter tend to be larger and more finely made. The **type site** was **multi-component**, but the Raddatz points occurred in Levels 5 through 12. These levels also contained stemmed projectile points, symmetrical **biface** knives, **scrapers**, a drill, a **grinding stone**, **hammerstones**, **bone awls**, a chisel fashioned from a beaver tooth, turtle shell bowl fragments, shell spoon fragments, antler flaking tools, an antler anvil and a **barbed** antler projectile point. **Radiocarbon dates** from the type site indicated that this **assemblage** dated between approximately 4500 and 1800 B.C. In Manitoba, projectile points similar to those termed Raddatz have been found in the southeastern part of the province.

radiocarbon dating. the **absolute dating** technique which



Raddatz points

more than any other revolutionized **archaeology**. Cosmic radiation from the sun constantly bombards the earth's upper atmosphere producing a radioactive form (isotope) of carbon (C-14) from non-radioactive nitrogen (N-14). C-14 mixes with the earth's atmosphere and oceans and behaves in precisely the same manner as does the non-radioactive (stable) form C-12. Because all living organisms absorb carbon through water or by breathing, the ratio of C-14 to C-12 within them is the same as that in the atmosphere, and this ratio has remained more-or-less constant over time. When an organism dies, however, it ceases to be part of the carbon cycle and thus no new C-14 is absorbed. Like all radioactive substances, C-14 is unstable, which is to say that over time it will break down (or decay) into a more stable form -- in this case C-12. The rate of this decay is known and is also constant. Consequently, by measuring the ratio of C-14 to C-12 in a piece of wood, bone or other organic matter from an **archaeological site**, one can determine the length of time since the sample last absorbed new C-14. Recently, **dendrochronology** has been used to check the accuracy of radiocarbon dating, with actual material from the tree rings being used as samples.

Recent. (see **Holocene**).

refugium. a geographical area which remains unaltered or changes much less than surrounding regions in response to a change in climate. A refugium, therefore, constitutes a haven for plants and animals which were once more widely distributed (plural refugia).

relative dating. see **dating, relative.**

remnant magnetism. see **magnetism, remnant.**

resistivity survey. a pre-excavation method for determining the size, shape and occasionally the nature of an **archaeological site**. It works on the principle that different deposits offer differential resistance to an alternating current passing through them, largely in response to the amount of water contained within them. Thus a damp, buried ditch will provide less resistance while a wall or foundation will offer more. Mapping electrical resistance across a site can greatly aid the archaeologist in deciding where to dig.

reticule. a frame with a grid used as an aid in mapping. Those used in Manitoaba consist of a square wooden frame with a network of strings set at regular intervals. These may be placed over a **feature** thus allowing more accurate sketch maps to be made. Locally, reticules have found their greatest utility in the recording of **petroforms**.

retouch. see **flaking, retouch.**

reworking. modification of an object so that it may be used again. The reworking of stone **artifacts** after breakage was particularly common in times and places where suitable lithic resources were scarce. A **projectile point** which had been broken at the tip could easily be resharpened and some were probably reworked several times in this

Salmon River Side-notched. one of the **projectile point** styles of the Bitterroot **Phase** of Idaho.

salvage archaeology. **archaeology** conducted primarily because a site or area is in imminent danger of destruction by natural forces or by construction or development. The British equivalent to this term -- rescue archaeology -- is self-explanatory.

sand. a loose material composed of minute (0.2 to 2 mm in diameter) particles of weathered rock, especially quartz.

Sandia. a mountain range in New Mexico which has given its name to a local cave and to the oldest of the three archaeological **components** within it. Beneath a **Folsom** occupation, Frank Hibben (1941) found another component which bore **scrapers**, prismatic **flakes**, two **hearths**, two **bone** artifacts which may have been used as **projectile points**, and a number of stone projectile points of a hitherto unknown type. These were of two forms; Sandia I points were characterized by **convex** bases, while Type II had **concave** bases and were occasionally **fluted**. Both were generally crudely flaked and were single-**shouldered**. Associated **fauna** included horse, camel, **mastodon**, **mammoth** and a now-extinct species of bison. Both the **stratigraphy** and the faunal **association** argue for an age greater than Folsom and possibly older than **Clovis** but unfortunately it is currently impossible to place Sandia in time with any degree of confidence. Sandia is probably the rarest of the **Palaeo-Indian** styles and because of their frequent crudeness of manufacture, among the most commonly misidentified. Points which have been called Sandia have been reported in widely scattered localities from the Canadian **Prairie** Provinces to Texas, and from California as far east as Alabama.

sandstone. a general name for any of the common **sedimentary** rocks composed of **sand** grains cemented together with **clay**, iron oxide or calcium carbonate.

Sandy Lake Ware. a **cord-impressed** or smoothed-over **Late Woodland ceramic ware** of southeastern Manitoba, northern Minnesota and northwestern Ontario. These **globular** vessels are small when intended for use in **mortuary** contexts, while utilitarian vessels may approach 15 liters in volume. When present, decoration consists of **notching** at the lip or **punctates** (Anfinson 1979). In many respects, Sandy Lake Ware is similar to the Cemetery Point Corded type defined by MacNeish in southeastern Manitoba.

scaffold burial. see **burial, scaffold.**

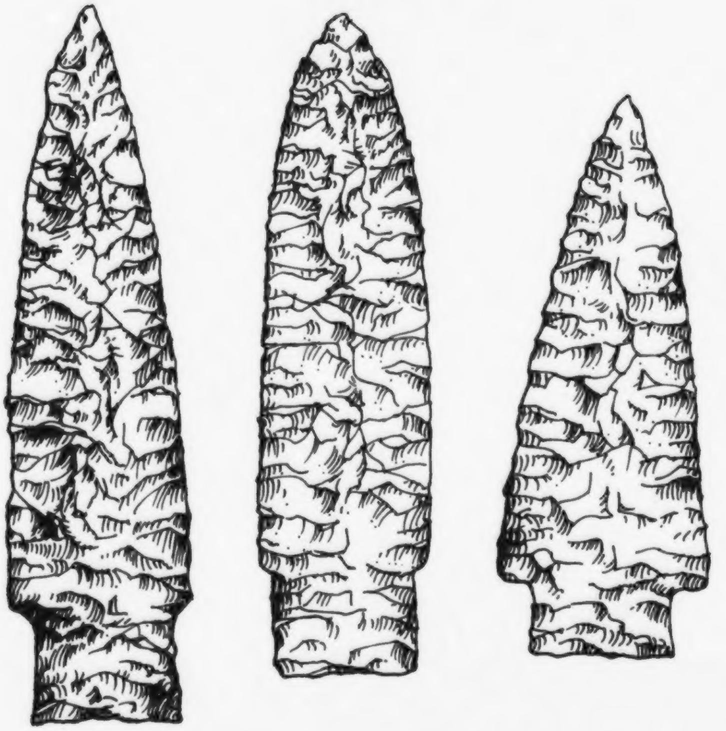
Scandic. a central North American climatic episode dating from **A.D.** 270 to A.D. 690 which represents the warming trend which culminated in the **Neo-Atlantic** Climatic Episode (Wendland 1978).

scapula hoe. a hoe fashioned from a scapula (shoulder blade). In Manitoba the **bone** is usually that of a bison or deer.

scar, bulbar see **bulbar scar.**

schist. any of a group of **metamorphic** rocks which may be split into plates or needle-shaped grains. Constituent elements may include mica, chlorite, talc or iron.

Scottsbluff. a town in western Nebraska which has given its name to a nearby **archaeological site** and to the distinctive stemmed **Plano projectile points** which were recovered from it. The latter may be of two styles designated Types I and II. The Scottsbluff Type I projectile points are parallel-sided or slightly triangular in outline and have poorly-defined **shoulders** above wide stems. **Flaking** is either transverse parallel or more irregular. Length ranges from 5 to 10 cm. In many respects, these are similar to the **Eden** points with which they are sometimes associated save that the Scottsbluffs tend to be wider relative to their length. Scottsbluff Type II points are similar to the Type I specimens, but have more triangular blades and more pronounced **shoulders**. The associated **artifacts** and **fauna** and the distribution of the points are those of the **Cody Complex**.



Scottsbluff points

scraper. an **artifact** used to remove the fat from the underside of a hide or to smoothe wood. Unless otherwise specified, these are generally understood to be made of stone. **combination (side- end-) scraper.** one which is sharpened on at least one side and one end. **dome (-shaped) scraper.** a scraper which is roughly circular as seen from above, dome-shaped in cross-section and sharpened around most or all of its circumference. **end-scraper.** one which is worked at one or both ends. The "end" may be defined as the shorter of the edges in a rectangular specimen or the end which initially formed part of the striking platform or the edge opposite it. **flake scraper.** technically any scraper fashioned from a **flake**, but in general usage a scraper made on a thin flake; a raclette. **keeled scraper.** a scraper with an intact **dorsal** ridge. **scraper plane.** a large, often oval scraper with a flat **ventral** face and dome-shaped dorsal face which is often sharpened on one side. **side-scraper.** a scraper which is sharpened on one or both sides. The "side" may be defined as one of the longer edges, or one of the edges adjacent to the striking platform. **tabular scraper.** a scraper fashioned from a flake with flat, often parallel dorsal and ventral faces. **thumb(nail) scraper.** a small, often domed scraper shaped like a thumbnail.

screen. a wire mesh mounted on a frame which is used to sift the **soil** from an archaeological excavation. The screen may be used manually or shaken by means of a small motor and serves to catch the specimens which are too small for the excavator to collect practically. The size of the mesh depends at least partially on the fineness of the deposits on the site. In Manitoba, sizes from 1/16" to 1/4" are the most common. Experiments have shown that different mesh sizes produce dramatically different results in the relative frequencies of objects of different sizes.

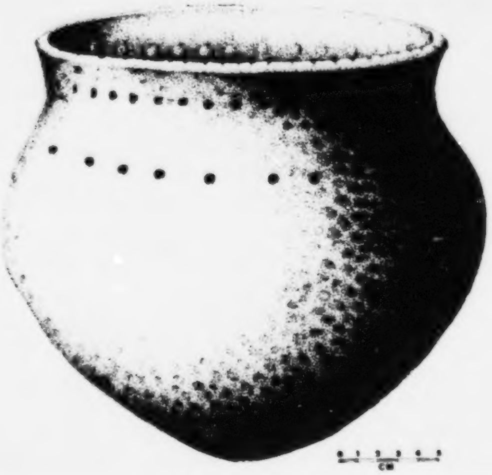
seasonal round. 1. the sequence of places or different **ecological** zones which a group of people exploit throughout the course of the year. see **Primary Forest Efficiency.** 2. the cycle of activities pursued throughout the year.

secondary burial. see **burial, secondary.**

secondary flaking. see **flaking, secondary.**

sedimentary. of or pertaining to stone which has been formed from loose deposits which have been subsequently compacted by the weight of overlying deposits or water.

Selkirk. a town just north of Winnipeg which has lent its name to a distinctive **ceramic ware** (also called Mistikwas) as well as the **phase** within which it occurs. This **Late Woodland-protohistoric culture** is of particular interest to archaeologists as Selkirk, more so than any other prehistoric **complex**, can be equated with a specific ethnic/linguistic group -- in this case the Cree. One of its most distinctive **traits** is the **pottery**, fashioned either by the **paddle-and-anvil** technique utilizing a fabric-wrapped paddle, or formed inside a fabric or basket mould. Like **Blackduck**, vessel shape is **globular** with slightly constricted necks and outflaring rims. Rims may be undecorated, encircled by a single row of **punctates** or impressed with a cord-wrapped stick. Other items in the inventory include a variety of small, triangular side-notched **projectile points**, **scrapers** and **bifaces**, pitted **hammerstones**, full-grooved **mauls** and tubular **steatite** smoking pipes. The **bone-tooth-antler-shell** industry was well developed or at least is well preserved in the **archaeological record**. Included in this category are shell paint dishes, antler end-scraper handles, beaver tooth **gouges**, and in bone: **defleshers**, **harpoon** heads, hoes, **awls** and needles. Site locations, the tools produced and the **floral** and **faunal associations** bespeak a highly diversified **economy** involving the hunting of various game species (deer, moose, caribou, bear), the hunting and/or trapping of smaller, often riverine mammals such as beaver, the taking of migratory fowl, a heavy reliance upon fish, the collection of shellfish, and the exploitation of plants, central among which may have been wild rice. The way of life of these people was essentially that described by the early explorers and traders in the province -- one which underwent rapid change in the face of European encroachment.



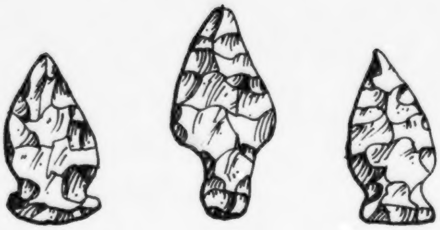
Selkirk pot

Selkirk Chert. a white to cream-coloured, medium to fine-grained limestone **chert** which occurs naturally along the banks of the Red River. Most nodules are dense, grey, and often mottled in appearance while those of poorer quality are chalk-like. Due to its **conchoidal** fracturing properties, Selkirk Chert was a popular material for the manufacture of stone tools throughout most of the province's **prehistory** (Leonoff 1970).

Selkirk Focus. the original term for the Mistikwas or **Selkirk** Phase.

Selkirk Side-notched. the **projectile point** style associated with the **Selkirk** culture. These range in length from 1.9 to 3.0 cm and have **convex** bases and wide **side-notches** near the base.

Selkirk Ware. the more common term for **Winnipeg Fabric-impressed Ware** -- the **pottery** style associated with the **Selkirk Culture**.



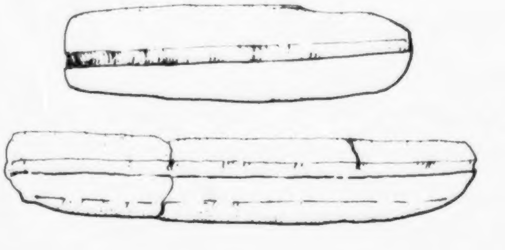
Selkirk Side-notched points

seriation. determination of the **chronology** or sequence of styles or **assemblages** by any of a number of different means. It is often assumed that a style, such as a **pottery** decoration, will be rare in relation to other styles when it is first used, will subsequently increase in popularity (and frequency), and will finally become increasingly rare once again. Thus, a number of assemblages can be placed in varying orders until the relative frequencies of different styles all fall into a smooth sequence. Once the proper sequence is established, it can be used as a **relative dating** technique to place other assemblages into the overall chronology. **Stratigraphy** is another, more direct method of seriating assemblages. If various combinations of assemblages occur at a number of **multi-component sites**, all of the assemblages may be placed in proper sequence relative to one another.

serrated. having a notched, toothed or saw-like edge.

settlement pattern. 1. the spatial relationship of **artifact** classes within a single site. Such studies serve to indicate the **activity areas** at a site and may allow inferences of social and political organization to be made. For example, such elements as the presence of more exotic trade goods, or a greater diversity of **faunal remains** associated with a larger house structure might indicate that its occupants were more affluent and perhaps more influential than their "poorer" neighbours. 2. the spatial relationship of a number of sites of the same **culture** and the **environmental** setting within which each occur. The investigation of such patterns can provide useful information on the relationship between **subsistence, technology** and **ecology**.

shaft smoother. a coarse-grained object (usually stone) with a groove for an **arrow** or **spear** shaft. The shafts are smoothed by abrasion after the fashion of sanding. Shaft smoothers may come in pairs which fit together around the shaft.



Shaft smoother

shaft straighteners. a naturally or artificially perforated tool of **bone** of stone. The wooden shaft, while still in a "green" or fresh state, is inserted into the hole and the implement is then used as a lever to bend the shaft straight.

shaft wrench. see **shaft straightener.**

shale. a dark, fine-grained **sedimentary** rock formed of **clay** with cleavage planes parallel to the bedding.

shaman. the Siberian term for medicine man. By extension, the term is now used for an individual in any society who derives power directly from the supernatural and uses it for healing or for interpreting unusual phenomena. Only rarely do shamans use their power to harmful ends.

sherd. (or shard). a fragment of any brittle substance, especially **pottery**.

Shield Archaic. an archaeological **tradition** associated with the **Pre-Cambrian** Shield-**Boreal Forest** of the eastern half of Canada throughout the **Archaic** Period. According to the chief proponent of this construct, J.V. Wright (1972), Shield Archaic populations developed from an earlier northern **Plano (Agate Basin, Keewatin Lanceolate)** base in the Keewatin District. The recession of glacial ice allowed plants and animals to spread throughout the Shield which in turn provided the impetus for early Shield Archaic peoples to expand throughout the area. Ongoing climatic change, however, together with the expansion of **Pre-Dorset** peoples which it favoured, forced out the earlier residents of Keewatin at approximately 1000 **B.C.** Once adapted to life in the Boreal Forest, Shield Archaic peoples' **lifeways** remained essentially unchanged for thousands of years with little if any influence from **cultures** in adjacent **environmental** zones. Continuities in lifeways, **artifact** styles and the geographic area occupied, lead Wright to suggest that Shield Archiac people spoke a language ancestral to modern **Algonkian**. Artifacts recovered from Shield Archaic sites include a variety of **notched** and **lanceolate projectile points**, various **scraper** and **biface** forms, **uniface blades** (sense 2), wedges, flake knives, **hammerstones, preforms**, ground slate objects, **drills, abraders, manos, metates, paintstones, spokeshaves, anvils**, ground **celts**, points and knives, **backed blades** (sense 2), flaked **adzes**, and copper fishhooks, **barbs** and **gaffs**. For Wright (1972), the relative frequencies of the major artifact classes, projectile points (16.3%), biface blades (25.8%) and scrapers (41.6%) are **diagnostic** of Shield Archaic sites. The Shield Archaic is poorly dated. Wright suggests a date on the order of 5000 **B.C.** for the beginnings of the tradition and accepts a **radiocarbon date** of **A.D.** 727 from a site on the north shore of the Gulf of St. Lawrence as representative of a late survival of the Shield Archaic. Unfortunately, **bone** preservation is extremely poor throughout the

Shield and thus radiocarbon dates are few and the reconstruction of **subsistence** patterns is a highly inferential matter.

shouldered. having a lateral extension or protrusion. This term may be used to describe knives, **projectile points** or **ceramic** pots.

shovel test. a small scale, generally informal test excavation to ascertain the nature of the deposits, to determine the presence or absence of an **archaeological site**, or to delimit the boundaries of a known site.

side-blade. a sharp, **bifacial** tool set into the side of a **harpoon**.

side notching. see **notching, side**.

side-scraper. see **scraper, side-**.

silent trade (or dumb barter). a system by which two groups exchange goods without making direct contact with one another. One group leaves its goods at an appointed place and departs. The second group then arrives, leaves its exchange goods and departs. The first group returns and if satisfied with the offer, takes the exchange goods; if not, they reclaim their own goods. Finally, the second group returns and goes home with whichever set of goods remains.

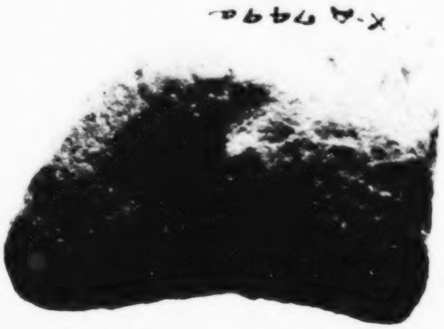
silt. a fine, loose sediment deposited by water and composed of particles between 0.02 and 0.002 mm in diameter.

Simonsen. an **archaeological site** in northwestern Iowa which produced **artifacts** of the **Early Side-notched Point Tradition** and more specifically of the **Logan Creek Complex**. In fact, some designate these **assemblages** as the Simonsen (rather than Logan Creek) Complex. The excavators believed that the site was used as a **bison** (**occidentalis**) drive. **Radiocarbon dating** showed the site to have been occupied at 6480 **B.C.**

sinew. tendon; the tough tissue which attaches a muscle to a **bone**.

sinew-backed bow. see **bow, sinew-backed**.

sinew stone. a soft, abrasive stone against which a length of **sinew** is drawn back and forth. This thins the sinew and makes it more uniform. Over time, deep grooves are worn into the stone from repeated use.



Sinew stone

single component site. an **archaeological site** which contains the remains of only one **culture**.

Siouan. a language family which, among others includes Crow, Hidatsa, Mandan, Assiniboine and Dakota.

Sister's Hill. a **single component Hell Gap** site in north central Wyoming which produced **radiocarbon dates** of 7700 and 7650 B.C. The Sister's Hill Phase, as the term is used by Irwin (1971), includes the **Agate Basin** and Hell Gap complexes as sequent subphases in the interval between 8500 and 7500 B.C.

site. see **archaeological site.**

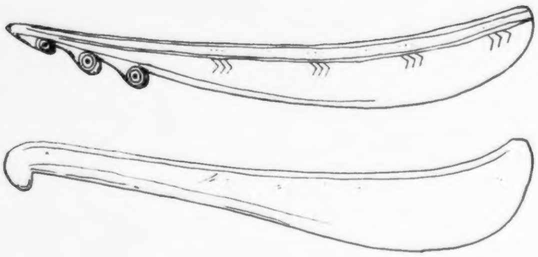
slate. a fine-grained **metamorphic** rock formed of mudstone or **shale** and generally dark in colour. Slate may be sculpted or ground to produce a sharp edge.

slip. a creamy or watery mixture of untempered **clay** and water which is applied to the surface of a pot before it is **fired.** This serves to smooth the vessel surface and renders it more waterproof by clogging the pores of the **earthenware.** A slip may also change the colour of the pot to virtually any desired shade.

slump. the collapsing of a cliff or the walls of an excavation.

smudge. a small fire which produces smoke and drives away insects.

snow knife. a large flat-bladed knife often fashioned from **bone** which is used by the **Eskimo** to cut the blocks of snow for **igloos.**



Snow knives

soapstone. see **steatite.**

soil. the loose layer at the earth's surface which is composed of weathered rock particles, water, **humus** and air and which is capable of supporting rooted plants. see **pedology.**

soil profile. see **profile, soil.**

Sonota Complex. a **Late Prehistoric Period complex** originally defined on the basis of village and **burial mound** sites on the Missouri River in North and South Dakota. These bison-hunting people made extensive use of **Knife River Flint** to manufacture various tools including an **atlatl** point which is in many respects similar to the **Besant** type. One rather curious **trait** of this complex is the occurrence of bison long**bones** driven vertically into the ground. The same phenomenon has also been noted at Besant sites and it has been suggested that they were used as **anvils in flint knapping.** Sonota people buried the bundled bones of their dead in mounds. The presence of whole and partial skeletons of bison in these mounds attests to the symbolic as well as practical significance attached to this animal. Authorities are divided in their interpretation of the relationship between Besant and Sonota. Some view them as separate complexes while others would group them all as Besant (Reeves 1983; Syms 1977).

Southern Cult (also Buzzard Cult, Death Cult). the name attached to the ceremonial **artifacts** and art style shared by **Mississippian** sites. Wood, copper, **clay**, stone and shell were used to fashion figurines, headdresses, earspools, **celts**, plaques, **axes**, masks, **effigy** rattles, maces, and effigy pipes. Depicted through these media are birds of prey, vultures, skulls, spiders, dancers with snakes, winged warriors holding human heads, the hand-eye symbol, the sun symbol and the weeping eye (an eye with attached zig-zag lines) **motif**. Included too are depictions of priest-like figures holding daggers to the throats of their victims and various other scenes suggestive of human sacrifice. Fairly clearly of Mexican inspiration, the ceremonial artifacts are more like one another over a broader area than are the more mundane tool and weapon styles. For this reason, they are seen as representative of rituals and beliefs which are shared by a large number of peoples irrespective of the differences in the other aspects of their lives.

spall. a **flake** which has been produced naturally (such as by exposure to heat) or by human design.

spear. a weapon consisting of a long shaft and a sharp point which may be thrown (as a javelin) or thrusted.

spear thrower. see **atlatl**.

spirit helper. a personal guardian or protective spirit who was often acquired by questing and privation and who usually communicated through dreams or visitations.

spokeshave. a **scraper** with a pronounced **concave** working edge used for scraping **arrow** or spear shafts or **bows**, etc.

stade (or stadial). the period of greatest cold and maximum advance of an ice sheet during a time of **glaciation** (plural stadia or stadials).

stadial rod. a graduated staff used in conjunction with a **transit** or **theodolite** in **surveying**. The distance from the instrument to the rod may be calculated in the same units with which the rod is calibrated (meters or feet).

stage. a distinct "level" or period of development of an organism or a **culture**.

statistics. 1. the science which concerns itself with the collection, classification and use of quantitative **data** and with the application of probability theory to estimate aspects of a population from a sample. 2. the numerical **data** themselves.

steatite. a soft grey-green or brown talc which was worked into smoking pipes and bowls by **grinding** and polishing; also known as "soapstone".

sterile. in **archaeology**, lacking in any evidence of human activity.

stimulus diffusion. see **diffusion, stimulus**.

stockade. an enclosure or a strong, high barrier made of stakes or timbers.

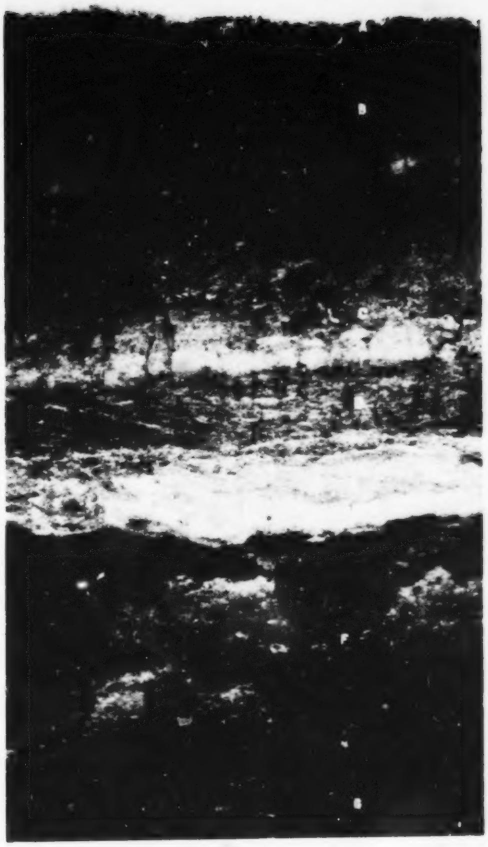
stone boiling. a method of cooking. Hot stones or **clay** balls are dropped into a **basket**, or other container or into a pit which contains water and the food to be cooked. The stones are replaced as they cool. This technique was used in instances in which the container could not be directly exposed to an open flame.

stoneware. a kind of **pottery** made of a **clay** high in vitreous minerals and **fired** at such a high temperature (1200°C) that it fuses into an extremely dense, non-porous substance. Stoneware is very hard and impervious to acids and scratching.

strandline. shoreline; an active beach or one which marks the edge of a now-extinct body of water.

stratified random sampling. a sampling method in which the area or site to be tested is first divided into a number of smaller sections (strata) and then each of these is sampled randomly. Excavation is such a time-consuming business that archaeologists rarely have the time or funds to excavate an entire site. The problem becomes completely insurmountable when the region to be investigated comprises a township, valley or municipality. For that reason, archaeologists must concern themselves with methods of taking a sample, the object of which is to achieve a body of **data** which is representative of all that the site or region contains. To avoid human bias, an archaeologist might take a sample randomly, but too often, truly randomized units cluster together leaving some areas untested while "oversampling" others. Stratified random sampling ensures that the entire length and breadth of a site or all of the **ecological** zones within an area are tested while at the same time retaining an acceptable degree of randomness for most purposes.

stratigraphy. having the property of being arranged in a series of layers, after the fashion of a layer cake. According to the Law of Superposition, when one deposit overlies another, the higher must have been laid down more recently. As a consequence, any **artifacts** found in the upper layer must be younger than those from the lower layer. Different kinds of deposits accumulate in response to different **environmental** factors. Wind-blown (**aeolian**) sediments are different from those laid down by flowing water (**alluvium**) and **soils** which form under coniferous forests vary from those which form under deciduous or **grassland** conditions. Consequently a soil **profile** may consist of a series of layers (strata) which are visibly distinct from one another in terms of their composition, colour, texture and particle sizes. If the layers bear artifacts, the



Soil profile showing stratigraphy

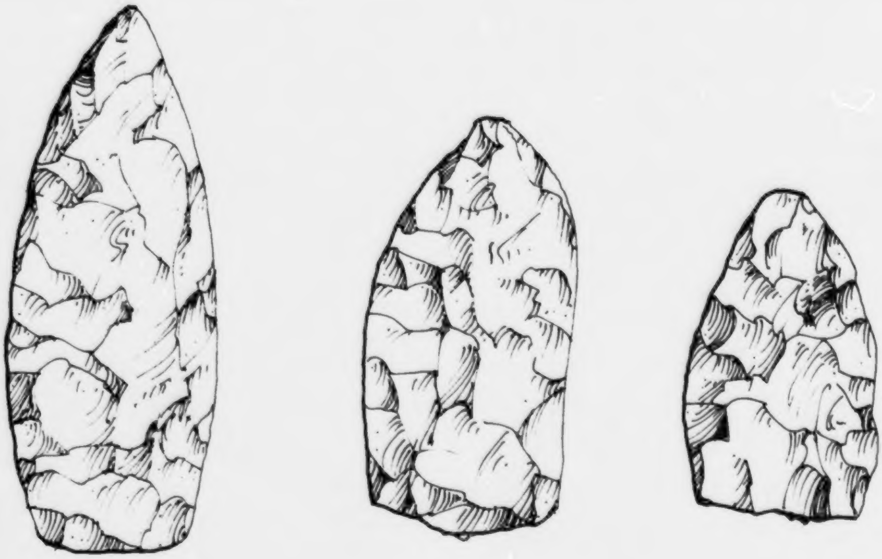
archaeologist can be confident that those from a single **stratum** "belong together" and are of approximately the same age. Furthermore he or she can be assured that they are younger than those from the lower level, but older than those from the overlying stratum. Stratified **multi-component sites** are therefore invaluable aids in establishing the cultural **chronology** of a region. A study of the strata themselves (**pedology**) may indicate the sequence of environmental conditions which characterized the area over time and suggest the various modes of **adaptation** and **subsistence** which the local people employed. Unfortunately, most multi-component sites in Manitoba are **mixed** due to **frost action**, rodent tunnelling or root growth. **collapsed stratigraphy**. a profile in which one stratum has eroded out thus causing the upper strata to **slump** down upon a lower stratum.

stratum. a level or layer, particularly when part of a series of layers. (plural strata).

strike-a-light. an object of stone, iron or steel which is struck against a stone to produce a spark for igniting gunpowder or tinder.

striking platform. that portion of a **core** (sense 1) which is struck in order to remove a **flake**.

Sturgeon Triangular. a **projectile point** style identified by Richard MacNeish (1958) on the basis of his excavations in southeastern Manitoba in the early 1950s. These are 36 to 70 mm in length, and have straight or slightly **convex** bases and parallel or slightly convex sides. Many of these **lanceolate** specimens are crudely fashioned; in fact, MacNeish suspected that some of them were not projectile points at all, but rather **quarry blanks**. They were found in **association** with artifacts of the **Whiteshell** and **Larter Foci**. The type name and one of the foci with which it was associated (Whiteshell) are no longer used by Manitoba archaeologists.



Sturgeon Triangular points

subarctic. 1. of or pertaining to regions south of the Arctic Circle; these regions themselves. 2. of or pertaining to the coniferous **(Boreal) forest** zone which lies south of the **tundra** and north of the **grasslands** and deciduous forests; this zone itself.

Sub-Atlantic. a central North American climatic episode dating from 810 B.C. to A.D. 270 which was cooler and moister than the present (Wendland 1978).

Sub-Boreal. a central North American climatic episode dating from 3110 to 810 B.C. which marks the transition from the hot, dry **Atlantic** to the cool, moist **Sub-Atlantic** episode (Wendland 1978).

subsistence. livelihood; the means by which an individual or group maintains life.

sucking tube. a hollow cylinder, often made of a cut section of longbone, through which a **shaman** or other healer magically withdraws an **intrusive** object from a patient. The belief that illness is a result of some foreign object within a person is fairly widespread. Sometimes the shaman will hide a small object within his mouth beforehand so that after his treatment he may produce it as proof of the cure.

supine burial. see **burial, supine.**

Sundance. a renewal and purification ceremony fairly common among North American

plains Indians. Generally, a man would pledge to give a Sundance if he or a relative was guilty of some misconduct or if the hunters had been unable to locate buffalo. The ceremony often lasted four days and nights and was marked by much singing, dancing, self torture and mutilation as well as more purely social activities such as courting, gambling and the playing of games.

surface collection. the recovery of **artifacts** from the ground surface; the artifacts themselves. These are generally of limited interpretive value as their original spatial relationships (see **context**, **in situ**, **provenience**) have been disturbed. Nonetheless it may be sufficient to determine the age and cultural affiliation of the original site. If done systematically, it can also indicate the size of the site and the location of specific **activity areas**.

survey. 1. the investigation of an area to locate **archaeological sites** and to acquire a preliminary understanding of its **prehistory**. This latter aim is most commonly achieved by means of **surface collecting** and the excavation of **test pits**. 2. to systematically map and **grid** an archaeological site. Surveying instruments such as the **transit** and the **theodolite** are generally used.

Swan River Chert. a multi-coloured (white, grey, pink, yellow, orange) chert with a glossy, waxy or dull lustre with **concoidal fracturing** properties composed largely of **quartz** with **chalcedony** as a cementing agent. Swan River Chert is quite common in the western half of the province and was a popular material for the production of stone tools throughout its **prehistory** (Leonoff 1970).

tabular scraper. see **scraper, tabular.**

taconite. a fine-grained **sedimentary** rock which occurs naturally in the Lake Superior region and which is a suitable material for the manufacture of stone tools.

taiga. the **environmental** zone dominated by coniferous tree species which lies immediately south of the **tundra** in the Old and New Worlds. In North America, this equates with the **Boreal Forest**.

Taltheilei. a **Late Prehistoric Period tradition** as well as a **complex** within that tradition. Named after Taltheilei Narrows at the northeast end of Great Slave Lake, and the characteristic use of a grey **shale** for **artifacts**, the Taltheilei Shale Tradition is thought by many to represent the **prehistoric** and **protohistoric** Athapaskans in the District of Keewatin. These nomadic caribou hunters used stemmed and **side-notched spear** and **arrow** points in pursuit of game, although **bone** and antler **projectile points** came to be used more frequently in more recent times. Other items in the inventory include **adzes**, **wedges**, **gravers**, **whetstones**, **scrapers**, **"chithos"**, **flake** knives, copper knives and **awls**, bone **gorges** and **perforators** and birch bark rolls. The associated **faunal** remains suggest that these people supplemented their diet with bear, fish, beaver and birds. **Radiocarbon dating** indicates that the Taltheilei Shale Tradition dates as early as 200 B.C. while the most recent components of the tradition contain European trade goods. In Manitoba, Taltheilei sites are restricted to the northwestern corner of the province (Noble 1971).

taphonomy. the study of the means by which organic materials become part of the **archaeological** (or fossil) **record**. A study of an object with an eye to determining how it has been preserved or why it has decomposed in the way it has can tell us something of the conditions prevalent at the time that it was deposited.

tang. a long, narrow, pointed projection at the base of a tool or weapon to facilitate **hafting**.

tarsal. of, pertaining to or constituting the **bones** of the human ankle and heel, or one of the corresponding bones of the hind leg of other animals.

taxon. a unit or group within a system of classification. (plural taxa).

taxonomy. the classification of objects or organisms on the basis of their similarities.

technology. 1. the knowledge and methods necessary to produce useable or consumable **artifacts** or products. 2. Broad categories fashioned from similar materials by similar methods (e.g. **Palaeo-Indian bone** technology).

temper. solid particles such as **sand**, **grit**, **crushed shell**, plant fibre or crushed **pottery** (**grog**) which is mixed with the wet **clay** before the **vessel** is **fired**.

Temper adds strength to pottery and makes it less likely to crack when drying or while being baked.

Temple Mound Culture. a less frequently used term for the **Mississippian.**

tent ring. the circle of stones used to hold down the edges of a tent and which remains behind in a slightly disturbed form after the tent is removed.

terminal moraine. see **moraine, terminal.**

Terminal Woodland. see Woodland.

terrace. the former banks of a river or shores of a body of water exposed due to a drop in water level. When terraces occur as a series of steps, the highest is taken to be the oldest as it would have been the first to be exposed.

test pit. a unit excavated to determine the presence or absence of an **archaeological site,** or the nature of the deposits.

textile. a fabric produced from the weaving of fibres of animal or vegetal origin.

theodolite. a **surveying** (sense 2) instrument capable of measuring vertical and horizontal angles and consisting of a tripod-mounted telescope.

threshing. separating grain from the husks and straw by beating or rubbing.

throwing board. see **atlatl.**

Thule. the Latin name which ancient geographers gave to the most northerly land in the inhabited world. More recently, the term has been applied to an archaeological culture which blanketed the North American Arctic shortly after A.D. 1000. The artifactual inventory of these coastally adapted people included rectangular winter houses, soapstone lamps and cooking vessels, trace buckles and swivels for dog harnesses, the ulu, bone and antler arrow and harpoon heads and carved ivory bird figurines. Judging from the time slope indicated by numerous radiocarbon dates, Thule culture emerged in Alaska and spread rapidly across the Arctic as far as Greenland. Their relationship, if any, with the earlier Dorset peoples is unknown but there is general agreement that the Thule is directly ancestral to the modern Inuit.

thumb(nail) scraper. see scraper, thumb(nail).

thunderbird. in mythology, a large bird that produced thunder by flapping its wings. Belief in the thunderbird was formerly widespread among native North Americans and in Asia.

Thunderbird Nest. the general term for a pile of boulders with a central depression. The function that these served is essentially unknown and in fact they may have been constructed for a number of different purposes. In the popular imagination they are places where young men went to receive a vision and/or a spirit helper. see also vision quest.

till. the unstratified deposits of a glacier, usually consisting of **sand, gravel, clay, silt** and boulders.

time-depth. the life span of a **culture** (sense 1), language or family of languages. Thus a culture which is recognized in the **archaeological record** as beginning in 500 B.C. and terminating at A.D. 500 would have a time-depth of 1000 years.

time slope. a series of dates which are progressively older in a given direction through space, thus pointing to the place of origin of the dated **complex** or **trait.**

tinkler (or tinkling cone). the (usually) metallic cones or cylinders which were used as ornaments on clothing. Brass sewing thimbles were sometimes used for this purpose. The **artifact** received its name from the sound produced by the many cones striking one another with each movement of the wearer or dancer.

tipi. the conical tent of hide over a wooden frame used by **plains** Indians.

tipi ring. 1. the circular arrangement of stones used to hold down the edges of a **tipi** in those areas where wood for stakes was unavailable. When camp was broken and the tipis disassembled, the stones would simply be rolled off and left behind thus maintaining the roughly circular arrangements. 2. a circular arrangement of tipis within a camp.

toggle. a device consisting of a rod or peg, pointed at one or both ends with a line attached near its centre. The toggling principle may be applied to buttons, or more familiar to archaeologists, the **harpoon.** The toggling harpoon is characterized by a detachable tip with a line fastened to a hole near its centre. When the point enters an animal, the shaft falls away and tension on the line causes the point to turn sideways thus firmly embedding itself.

tool-kit. as used by archaeologists, the full range of **artifacts** of a single **complex.**

topography. the study or description of the surface configuration of a region; the surface configuration itself.

tradition. a style, **technology** or **lifeway** which persists for a long period of time within a given region.

trait. a distinguishing or **diagnostic attribute** or aspect.

transhumant. of or pertaining to the seasonal movements of livestock from one grazing or browsing range to another.

transit. a **surveying** (sense 2) instrument capable of measuring vertical and horizontal angles and consisting of a tripod-mounted telescope. The transit is similar to the **theodolite** in many respects, but differs in that it has a longer telescope, exposed vernier scales and an integral compass.

transverse flaking. see **flaking transverse.**

travois. two long, parallel poles which serve as a frame to which baggage or supplies may be attached while in transit. One end of the poles is fastened on either side of a draft animal while the opposite ends drag behind. There is some evidence to suggest that the dog-drawn travois was a **Middle Prehistoric Period** innovation.

Travois

triangulation. a method of **surveying** (sense 2) in which an area is sub-divided into triangles of which two angles and the length of one side are known. The lengths of the other two sides are calculated using trigonometric functions.

tribe. in popular usage, any **non-literate** society. For anthropologists, however, the term usually takes on a more specific meaning. Like a **band**, a tribe is a fairly small, **non-literate** society, but it makes use of institutions (clubs, age grades, secret societies) to hold it together in addition to kinship networks. Many tribal societies subsist through **horticulture** or the raising of livestock rather than hunting and gathering.

trihedral adze. see **adze, trihedral.**

trim bit. a piece that is trimmed or pared off during manufacture.

trowel. a small hand tool consisting of a metal **blade** (sense 1) attached to a handle. The mason's trowel, having a flat blade (as opposed to the scoop-shaped blade of the gardening trowel), is the preferred tool for archaeological excavation in Manitoba.

truncate. to shorten or blunt by cutting off an end or through breakage.

tuckahoe. a green (when wet) or black (when dry), underground fungus which is generally found as large, moist nodules while ploughing a field. These are commonly and erroneously identified as (petrified) **pemmican.**

Tuckahoe

tumulus. a **mound** of earth or loose stones covering a **burial** (sense 3).

Tunaxa. a cultural **tradition** of the northern **plains** which includes the **McKean, Hanna, Pelican Lake** and **Avonlea Phases** (Reeves 1983).

tundra. the vast treeless region of North America, Europe and Asia which lies between the polar ice cap and the northern edge of the coniferous forests. The subsoil here is permanently frozen, but the surface soil may support mosses and lichens.

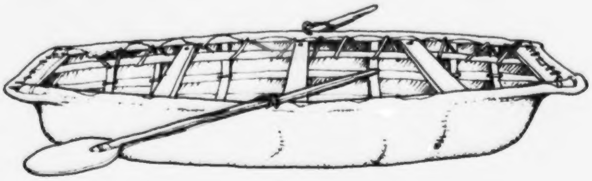
Two Creeks Interval. the **interstadial** within the **Wisconsinan** glaciation which preceded the **Valders** Re-advance. This period of somewhat milder climate persisted from 12,800 to 11,500 years ago.

type site. an **archaeological site** which has produced the **artifacts** which are considered to be typical of a particular **complex**. Very often, the site at which a complex was first discovered or defined is considered the type site. Thus, the **Oxbow** Dam Site is the type site for the Oxbow Complex and the **Scottsbluff** Bison **Quarry** is the type site for Scottsbluff.

typology. the classification of **artifacts** into groups (types) on the basis of method of manufacture, form, decoration, etc.

ulu. a half-moon shaped **Eskimo** woman's knife. Typically, it is made of ground slate, and is fitted with a wooden handle.

umiak. a large, open, flat-bottomed boat consisting of walrus hide over a spruce frame and used primarily by **Eskimo** women.



Umiak

uniface. a (usually) **lithic artifact** which has been worked or **retouched** on one face only.

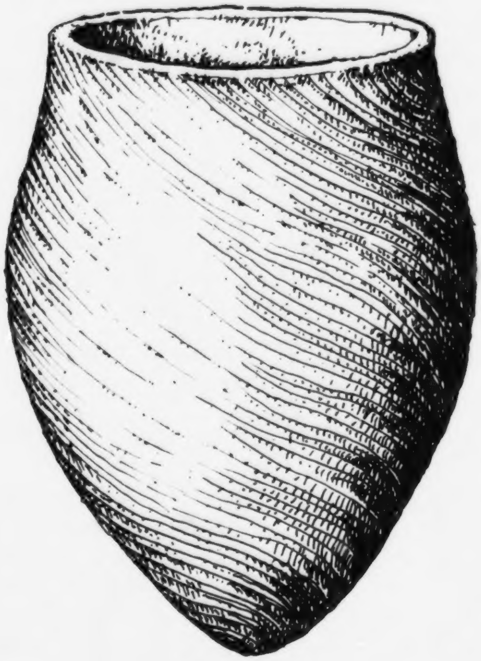
unit. one of the squares excavated on an **archaeological site**; a pit.

use-wear. see **wear pattern.**

U.T.M. abbreviation for Universal Transverse Mercator; a rectangular **grid** system found on all standard military maps which has been advocated for use in **site designation** and location by some archaeologists.

Valders. a re-advance of **Wisconsinan** ice in the Lake Superior and Michigan basins at approximately 11,800 **B.P.**

Valley. a county in Nebraska which has lent its name to a **Plains Woodland pottery** style and the **complex** and **phase** (originally **focus**) with which it is associated. Valley vessels are characteristically **conoidal** with vertical or **oblique cord roughened** exteriors and straight rims. Decoration is restricted to oblique and horizontal cord-wrapped stick impressions near the lip, exterior **bosses** and, less frequently, **incised** lines. Sites are most common in Nebraska and Kansas, but Valley **sherds** have been found as far north as southwestern Manitoba (Syms 1977).



Valley pot

vein quartz. see **quartz, vein.**

ventral. 1. the flat or **concave** face of an **artifact.** **2.** that face of an artifact which was nearest to the centre of the **core** from which it was manufactured. **3.** of or pertaining to the front of the body; towards the belly.

virilocal. pertaining to the pattern in which a newlywed couple takes up residence in the home, village or territory of the husband's family. Virilocality generally results in **patrilocality.**

vision pit. a subterranean pit in which a youth would wait while on a **vision quest.** Some **Thunderbird Nests** may have served essentially the same function.

vision quest. among some native North American peoples, a puberty rite in which young boys would seek visions and/or a **spirit helper.** Physical hardships such as lack of water, food or sleep and inadequate clothing in the winter were commonly part of the experience.

vitreous. of, pertaining to, or resembling glass.

wanaman. the Cree name for red **ochre**.

ware. the largest and most general classification into which **pottery** can be grouped. Wares are usually defined on the basis of such attributes as surface finish (e.g. smooth, corded, etc.), composition of the **paste** (e.g. shell-tempered, **grit tempered**, etc.) and vessel form (**globular, conoidal** etc.). A ware generally includes a number of types (often defined on the basis of decorative elements) and these in turn may include a number of varieties (based upon the manner in which the decorative elements are arranged).

waste flake. see **flake, waste**.

wear pattern. the distinctive way a tool is dulled or abraded through use. Examination of wear patterns can often more reliably identify the function a tool served, than can consideration of size and shape alone.

weir. a barrier constructed across a stream or on a tidal flat to trap fish.

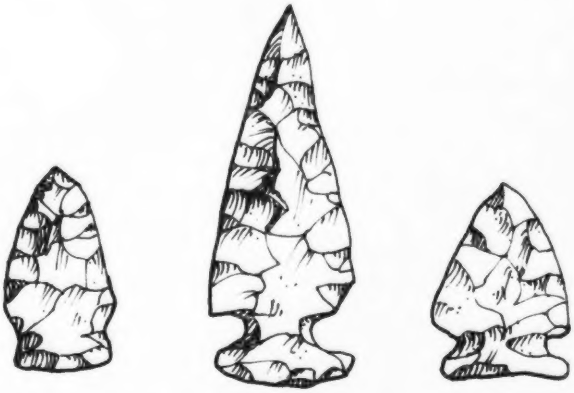
Wentworth Scale. a particle size scale ranging from **"boulder"** (greater than 256 mm) to **"clay"** (less than 0.0039 mm) with intermediate ranges to allow the definition of **cobbles, pebbles, sand** and **silt**. Sieves with appropriate mesh sizes are available so that the proportions of these various particles can be readily calculated.

whetstone. a sharpening stone.

White Contact. 1. in Canada, the contact of Europeans with the natives of a given region. 2. the time at which this first occurred.

Whiteshell Focus. the most ancient (3000 to 1500 **B.C.**) of the cultural-historical periods in MacNeish's (1958) southeastern Manitoba **chronology**. The only **diagnostic projectile points** of this **focus**, however, were those of the **McKean Complex**. Recent re-excavation of the **type site** failed to produce any material to support the existence of a Whiteshell focus. This term is no longer used by Manitoba archaeologists.

Whiteshell Side-notched. a **projectile point** style defined by MacNeish (1958) on the basis of his investigations in southeastern Manitoba and attributed to the **Nutimik** and **Manitoba Foci** (**Laurel** and **Blackduck** respectively). As originally defined, these specimens are rather long (42 to 58 mm) and bear



Whiteshell side-notched points

narrow but deep side **notches** above a **convex** or (less commonly) a straight base. Maximum width occurs just above or immediately below the notches.

wickiup. a beehive-shaped hut of grass or brush most commonly found in the American Southwest.

wigwam. a dwelling structure consisting of bark, matting or hide over a frame of arched poles.

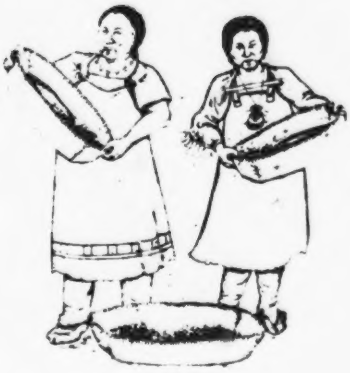
windbreak. a rude screen or fence intended to provide shelter from the wind.

Winnipeg Ovoid. a **projectile point** style defined by R.S. MacNeish (1958) on the basis of his investigations in southeastern Manitoba. These crudely chipped specimens are teardrop-shaped and range in length from 35 to 78 mm. As maximum thickness ranges from 5 to 60 mm, it is more than likely that many of these are not projectile points at all, but rather **quarry blanks**. MacNeish attributed the Winnipeg Ovoid style to the **Whiteshell** and **Larter Foci**.

Winnipeg Fabric-impressed Ware. the **ceramic ware** more commonly known to archaeologists as **Selkirk Ware**.

winnowing. separating grain from chaff by means of a wind or air current.

winter count. among native peoples of the North American **plains**, a pictorial history painted on buffalo hide.



Winnowing

Wisconsinan. the last period of **glaciation** of the North American **Pleistocene**. The Wisconsinan began approximately 70,000 years ago and ended with the commencement of the **Holocene** some 10,000 or 12,000 years ago.

Woodland Period. the most recent of the three "stages" in the **prehistory** of the eastern forests of North America. In accordance with the trend which began with the earlier **Archaic** Period, the Woodland was characterized by increased regionalism and the proliferation of local **cultures**. As this period is often defined by the appearance of **pottery** in local **assemblages**, and because these cultures adopted pottery at different times, no single date marks the beginning of the Woodland Period. In the American Southeast, pottery has been found which dates as early as 2400 B.C., while some northern peoples never adopted it. In southern Manitoba, a date of 200 B.C. or thereabouts is often applied to the Archaic/Woodland boundary. A number of other innovations are often associated with the Woodland: the use of the **bow and arrow** (as opposed to the **atlatl**), the construction of **effigy** and **burial mounds**, possibly the birch bark canoe (as opposed to dugouts) and in some areas, **horticulture**. The Woodland Period has been subdivided in a number of different ways. In the technical literature, the terms Early, Middle and Late Woodland are frequently used. In Canada, the Initial Woodland equates with the Early and Middle periods, while "Terminal" is used instead of "Late". By definition, a Terminal Woodland Culture (e.g. **Blackduck, Selkirk, Mistikwas, Mississippian**) is one that can be traced to the Historic period and identified with a known culture. Presumably this is not possible with the earlier Initial Woodland (e.g. **Laurel, Hopewell**) **cultures.**

wristguard. bracer; wristlet; a rectangular plate of **bone** or stone which is bound to the inside of an archer's wrist to protect him from the recoil of the bowstring.

xeric. of, pertaining to, or growing in dry conditions.

xerothermy. aridity; dry heat.

xerophyte. a dry-loving plant such as cactus.

X-ray fluorescence. the bombardment of a sample for chemical analysis with X-rays. The light which the sample emits indicates which chemicals are present and the relative proportions in which they occur.

zone. 1. a geographic area characterized by some distinctive feature such as the **flora**, **fauna**, climate etc. 2. a particular **cultural**, **geological** or **pedological** layer or level. 3. an area on the surface of a **ceramic** vessel which is modified differently (e.g. **punctates**, **rocker stamping**, painted, etc.) than the adjacent areas.

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